18th BIENNIAL REPORT OF THE N.C. DEPARTMENT OF CONSERVATION AND DEVELOPMENT C550 N872 1958-60

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JAN 1 9 '62

18th
Biennial Report
of the
North Carolina
Department
of

ONSERVATION & DEVELOPMENT



Industry Spoken Here



North Carolina's 18-man Commerce and Industry team of location engineers, headed by Wm. R. Henderson (Center), has a specialist for just about any "language" industry may speak—or any question you may ask. This team includes chemical, civil and mechanical engineers, research analysts, small-industry specialists, and other experts qualified to provide basic information on plant sites.

Give this team your challenge. It will be met in complete confidence, entirely without obligation, with a promptness that may surprise you.

For information about plant locations in North Carolina you can communicate in confidence with Governor Luther H. Hodges, Chairman of The Board of Conservation and Development, Raleigh, North Carolina.

NORTH CAROLINA

C550 N872 1958/60

To His Excellency
The Honorable Luther H. Hodges
Governor of North Carolina

In compliance with the Statutes of North Carolina, I am transmitting herewith the report of the Department of Conservation and Development for the biennium ending June 30, 1960.

Respectfully,
WILLIAM P. SAUNDERS,
Director

THE COVERS

Representative North Carolina advertisements produced by the Advertising Division are shown on inside front and back covers. During this biennium there were 820 advertisements that appeared in 138 publications with circulation of 405,404,930.

BOARD OF CONSERVATION & DEVELOPMENT

(As of June 30, 1960)

Governor Luther H. Hodges, Chairman

Miles J. Smith, Salisbury
1st Vice Chairman
W. B. Austin, Jefferson
D. G. Bell, Morehead City
F. J. Boling, Siler City

Orton A. Boren, Pleasant Garden
H. C. Buchan, Jr., North Wilkesboro
Scroop W. Enloe, Jr., Spruce Pine
Voit Gilmore, Southern Pines

Walter J. Damtoft, Asheville
2nd Vice Chairman
H. C. Kennett, Durham
R. W. Martin, Raleigh
Lorimer W. Midgett, Elizabeth City
Hugh M. Morton, Wilmington
Edwin Pate, Laurinburg
W. Eugene Simmons, Tarboro
B. C. Trotter, Leaksville
T. Max Watson, Spindale

Gladys J. Gooch, Secretary to the Board

Board changes during 1958-1960 biennium

¹ Succeeded R. M. Hanes, deceased; ² succeeded Leo H. Harvey, deceased; ³ succeeded Charles S. Allen, deceased.

COMMERCIAL FISHERIES ADVISORY BOARD

A. W. Daniels, Cedar Island &
Charlotte, Chairman
Eric W. Rodgers, Scotland Neck
W. H. Mason, Oriental

Amos R. Kearns, High Point

Dick O'Neal, Swan Quarter Lewis Hardee, Southport Monroe Gaskill, Cedar Island Ralph Meekins, Wanchese

DEPARTMENT OF CONSERVATION & DEVELOPMENT

William P. Saunders, Director

J. Edgar Kirk, Ass't Director

DIVISIONS AND DIVISION HEADS

Advertising	
Commerce and Industry	William R. Hendersan
Commercial Fisheries	
Community Planning	Robert D. Barbour
Forestry	F. H. Clardige
*Geodetic Survey	P. C. Daran
Mineral Resources	Jasper L. Stuckey
State Parks	Thomas W. Morse
Auditor	Sidney C. Halden
Public Information	Wade H. Lucas
* Division activated July, 1960.	

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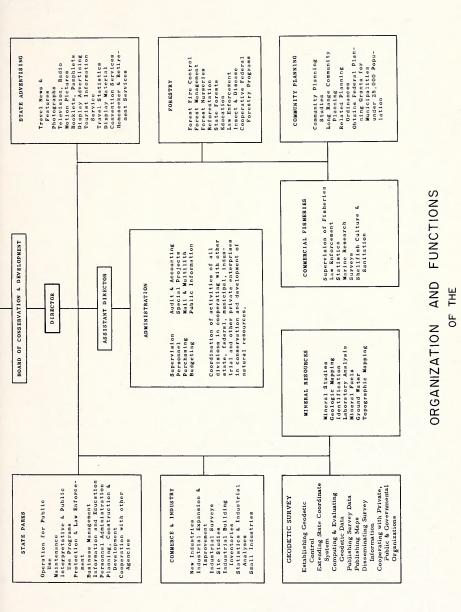
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FOREWORD

The mission of the Deportment of Conservation and Development is to conserve and develop and to promote the wise use of the natural resources of North Carolina for the common good of all her people.

This report is an account of the deportment's stewardship for the biennium ending June 30, 1958.

In the interest of readability, much detoil hos been omitted. Those persons wishing more information obout specific phoses of the deportment's program need only to contact the Deportment or the Division directly concerned.



DEPARTMENT OF CONSERVATION AND DEVELOPMENT

STATE ADVERTISING

Over a billion advertising messages about North Carolino reached readers, viewers and listeners throughout the notion in the 24-month period from July 1958 through June 1960.

Over two ond a half million booklets and pamphlets obout the Stote's attractions for industry, taurists and living in retirement were distributed, and there were 4,217 showings of Voriety Vocationland motion pictures.

The North Corolino story was further told in 273 news and feature releases and in 10,946 photographs distributed throughout the nation and to several foreign

countries.

The Advertising Division onswered 348,182 requests for infarmation about North

Corolino as a place in which to live, work and play.

Dividends from this enterprise were reflected in the greatest number of tourists ever to visit the Stote, and the lorgest number of new industries established in any biennial period.

MISSION AND RESOURCES

The ossignment of the Advertising Division is prescribed by Generol Stotutes 113-15 in which it is declored to be the duty of the Deportment of Conservotion and Development "to mop and carry into effect a systematic plan for the nationwide advertising of North Carolino, properly presenting, by the use of all ovailable media, the true facts concerning North Carolino and all of its resources."

The Division's budget for the two years was:

	Advertising	Printing	News, Photo, Promotion and Administration
1958-59	\$375,600	\$43,500	\$88,375
1959-60	385,000	\$63,900	\$84,589
Biennium	\$760,600	\$107,400	\$172,964

Average staff was 11 persons as follows: odvertising director, administrative assistant, trovel editor, 2 photographers, 2 secretaries and 4 inquiry and mail clerks. Mojor operations included:

ADVERTISING AND PUBLIC RELATIONS

All Stote odvertising was placed through Ayer and Gillett Advertising of Charlotte under controct for two years renewed as of July 1, 1959. Under the new controct, the odvertising agency was responsible not only for preparation and scheduling display advertising, but for public relations projects as assigned. These included assistance with industrial missions to Europe and to New York, Chicago and Philodelphio; travel promotion missions corried on in cooperation with the Corolina Motor Club, and other projects described under the Special Projects section.

156 industriol advertisements were placed in 23 magozines and 9 newspapers

with circulotion of 75,828,765. These were:

MAGAZINES

American Banker
Apparel Manufacturer
America's Textile Reporter
Business Week
Blue Book of Southern Progress
Chemical Week
Electronics
Electronic Industries
Factory
Food Engineering
Food Processing
Fortune

Foundry
Industrial Development
Iron Age
Newsweek
New Yorker
Plant Location
Plant Site Selection Handbook
Science
Steel
Time
U. S. News & World Report

NEWSPAPERS

Chicago Tribune Frankfurter Allegemenie Zietung Journal of Commerce New Yark Herald Tribune New York Times Philadelphia Bulletin Philadelphia Inquirer Philadelphia News Wall Street Journal

664 travel and "Living in North Carolina" advertisements were placed in 35 magazines and 71 newspapers with circulation of 329,576,165 as follows:

MAGAZINES

American Motorist
Christian Herald
Detroit Matar News
Field & Stream
The Fisherman
Golf Digest
Golf World
Grade Teacher
Hollday
Household
Journal of Lifetime Living
Keystone Motorist
Look
National Geographic
National Press Photographer
New York Motorist
New York Times Magazine
New Yorker

Ohio Motorist
Outdoor Life
Parade
Pittsburgh Automobilist
Popular Photography
Readers Digest
Redbook
Salt Water Sportsman
Saturday Evening Post
Scholastic Teacher
Sports Afield
Sports Illustrated
This Week Magazine
Travel USA
True
Wilson's Library Bulletin
Womon's Day

NEWSPAPERS

Akran Beacan Jaurnal
Army, Navy, Air Force Times
Atlanta Jaurnal-Constitutian
Augusta Chronicle
Baltimore American
Baltimore Sun
Birmingham News Herald
Bridgeport Post Telegram
Charleston (W. Va.) Gazette
Charleston News Caurier
Chicago American
Chicago American
Chicago American
Chicago Sun Times
Chicago Tribune
Christian Science Monitor
Cincinnati Enquirer
Cincinnati Enquirer
Cincinnati Enquirer
Cincinnati Post Times Star
Cleveland News
Cleveland Plain Dealer
Cleveland Press
Calumbus (Ohia) Citizen
Columbus Ledger Enquirer
Columbus News Ledger
Detrait Free Press
Detroit News
Detrait Times
Ft. Lauderdale News
Grit
Hartfard Courant
Indianapalis Star
Indianapalis Times
Jacksonville Times Union
Louisville Courier Jaurnal
Madison State Jaurnal
Miami Herald
Miami News

Milwaukee Journal
Mantgomery Advertiser
New Orleans Times Picayune
New York Herald Tribune
New York Journal American
New York Mirrar
New York News
New York Times
New York Times
New York Times
Newark News
Newark Star Ledger
Newark Star Ledger
Newark Star Ledger
Newark Times
Newpart News Time Herald
Orlando Sentinel Star
Philadelphia Bulletin
Philadelphia Inquirer
Philadelphia Inquirer
Philadelphia News
Pittsburgh Post Gazette
Pittsburgh Post Gazette
Pittsburgh Press
Pittsburgh Press
Pittsburgh Press
Pittsburgh Press
Pittsburgh Press
Sovannah News Leader
Retirement Life
Richmond News Leader
Retirement Life
Richmond News Leader
Savannah News Press
Savannah News Press
Savannah News Press
Savannah News Press
Sauth Bend Tribune
St. Louis Post Dispatch
St. Petersburg Times
Toledo Blade
Washington News
Washington News
Washington Post Times Herald
Washington Star
Wilmingtan News Journal
Yaungstawn Vindicator

The following radio stations carried 210 paid announcements:

WSB, Atlonta WLW, Cincinnoti WLAC, Nashville WTAR, Norfolk WRVA, Richmond WSLS, Roanoke WTOP, Washington

The grand total was 820 advertisements in 138 publications with circulation of 405,404,930. Cost for space and production was \$744,284.93. There were 210 radio broadcasts over 7 stations costing \$5,363.00.

Copies of all advertisements are preserved in the permanent files of the division. In addition to paid advertising, the State also received considerable space at no cost through "house" advertisements of McGraw Hill Publishing Co. in ADVERTISING AGE, BUSINESS WEEK and other publications.

PUBLICATIONS

Demand for publications about North Carolina continued to increase with new emphasis of specific information. This resulted in relative increase in distribution of publications such as "Living in North Carolina", "Fishing and Hunting", "Facts About North Carolina", "Historic North Carolina", and the "Travelbook", which lists accommodations, as compared with the old standby "Variety Vacationland",

which for years was our principal mailing piece.

The more discerning public also is requiring its information fresh, and it is now necessary to revise most of our publications at least annually. In years past an edition lasted two or more years, but now fresh editions may be required as frequently as quarterly, as in the case of the Travel News Bulletin. Since we do not have the resources to revise all publications completely with the frequency required, we have to resort to extensive face-liftings. This is particularly true of the "Variety Vacationland" book, in which process color engravings are very expensive and we must make multiple use of them to come within our printing budget.

In all, the Advertising Division produced 267 separate booklets, bulletins and pamphlets (both printed and multilithed) during the biennium. Total number of copies produced was 2,004,273. Distribution, which includes some publications produced by others, totaled 2,663,611. Average monthly inventory was 759,000 pieces of literature. A list of printed titles with number produced and cost follows:

No. Copies	Title	Cost
260,374	Variety Vacationland	\$39,780.87
305,100	Tar Heel State	4,552.13
63,400	Historic North Carolina	4,079.25
60,000	North Carolina Travelbook	9,000.00
30,000	Fishing and Hunting	8,284.82
100,000	Governor's Mansion	1,810.55
50,000	Capitol	996.61
25,000	Living in North Carolina	1,860.00
30,000	4-color travel folder	1,289.56
5,000	Industrial Development reprints	7,670.50
10,200	How's Business, Governor Hodges	5,471.09
329,100	4-color envelopes	2,761.15
4,000	4-color posters	1,311.50
209,400	Variety Vacationland Travel News	3,520.85
20,000	Travel Survey	978.16
7,550	Southern Governors' Conference	2,705.01
25,000	Fishing and Hunting envelopes	493.92
12,500	Time Magazine reprints	116.34
199,500	Facts About North Carolina	1,425.82
5,000	State and Local Taxes	248.40
200,000	Reply cards	574.20
10,000	Outer Banks	560.00
25,000	Great Smoky Mountains National Park	181.05
1,271	European Mission	561.50
5,000	Golf Digest reprints	500.00
13,990	Postcards of Capitol and Mansion	181.88
	Miscellaneous bulletins	1,220.97
	Total	\$102,136.13

INQUIRY SERVICE

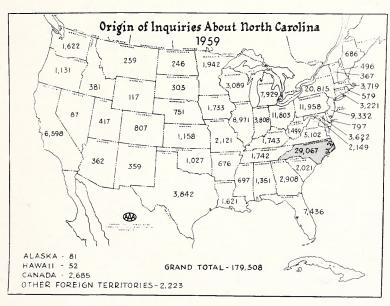
All 50 states and 60 foreign countries were heard from in the total of 348,182 inquiries during this biennium, an increase of 28,961 over the previous biennium. 153,715 of these inquiries were traceable directly to paid advertising, the remaining

194,467 did not carry key numbers, and could have been the result of advertising or the public relations program other than paid advertising carried out by the Advertising Division through its News, Photo and Special Projects sections.

Origin of inquiries is shown in the following table:

State No. Inquirie Alabama 2,96 Alaska 10	4 Nevada
Arizona 76 Arkansas 1,20 California 11,83	2 New Jersey 16,519 4 New Mexico 590 1 New York 36,719
Colorado 1,51 Connecticut 5,44 Delaware 1,53	5 North Dakota
District of Columbia 4,12 Florida 13,85 Georgia 5,64	1 Oklahoma
Hawaii 15 Idaho 70 Illinois 17,29	3 Rhode Island 1,110 8 South Carolina 3,872
Indiana	3 Tennessee
Kansas 2,25 Kentucky 3,40 Louisiana 2,95	3 Vermont
Maine 1,24 Maryland 7,11 Massachusetts 6,85	6 West Virginia 2,785
Michigan 14,91 Minnesota 3,89 Mississippi 1,36	7 Wyoming
Missouri 4,12 Montana 53	2

WHERE THE INQUIRIES ORIGINATE



This map, showing origin of inquiries serviced by the Advertising Division during the calendar year 1959, is reproduced through the courtesty of Carolina Motor Club, which prepared it as a public service for inclusion in the 1959 Travel Survey sponsored by the Travel Council of North Carolina.

PHOTOGRAPHY

Under a contract instituted in March 1959 with Modern Talking Pictures of New York, the first nation-wide distribution of the "Variety Vacationland" movie pro-

duced by Hugh Morton in 1958 was accomplished. Combined with the distribution through the film library of the University of North Carolina, which had been our major outlet dating from 1952, this national service resulted in a sensational increase in our motion picture distribution.

At the ending of the biennium, the following films were in circulation: 115 Variety Vacationland, 14 Tar Heel State, 3 Unusual Hunting. Total 132. They were shown to 4,202 audiences (live and television) in 48 states. Of these, 4,217 showings

were to live audiences and 135 television shows.

Distribution of still pictures was 10,946 as follows: black and white prints 10,390,

color transparencies 416, negatives 140.

In addition to pictures produced for publication by newspapers and magazines and other publications throughout the world, the photographic section produced art for our own publications. This required frequent field trips on assignments covering every section of the State. The photographic library of more than 50,000 negatives must be up-dated constantly.

NEWS AND FEATURES

In many respects, the Travel News section is the backbone of the entire operation of publicizing North Carolina. Without its production, which includes booklets and pamphlets as well as press releases and bulletins, accurate and current information

for the paid advertising program would be lacking.

During the biennium 273 news and feature stories were produced for world-wide distribution. The news staff worked with editors on assignment from national newspapers and magazines. A few of the publications in which North Carolina material originated with the North Carolina News Bureau appeared were TIME, LIFE, RED-BOOK, READER'S DIGEST, GOLF DIGEST, HOLIDAY, SATURDAY EVENING POST, NEWSWEEK, TRAVEL, INDUSTRIAL DEVELOPMENT, BUSINESS WEEK, NEW YORK TIMES, CHICAGO TRIBUNE, WASHINGTON POST, OUTDOOR LIFE, SPORTS AFIELD, FIELD & STREAM, WASHINGTON NEWS, MILWAUKEE JOURNAL, McCALL'S, GLAMOUR, MADEMOISELLE and many trade publications and house organs. Editorial assistance was given NATIONAL GEOGRAPHIC, READER'S DIGEST, SATURDAY EVENING POST and SPORTS AFIELD on stories to appear in the next biennium.

The Travel News section produced 154 radio broadcasts and 6 television shows.

BULLETIN SERVICE

In addition to printed promotional publications and news releases, the Division issued 90 multilithed bulletins on subjects ranging from golf facilities to importation of flowers, shrubs and trees. These are strictly informational bulletins and are revised frequently. The largest of these projects is the "North Carolina Travel News", a four-page news type publication that is issued seasonally and has a world-wide circulation. 211,420 copies of this were distributed during the biennium.

SPECIAL PROJECTS

Special projects are myriad. They range from supplying a North Carolina flag to an Army outpost in Korea to provide information service for the Southern Governors' Conference and the Southeastern Conference of the Council of State Governments which held meetings in the State. Servicing North Carolina delegations to out-ofstate conventions with literature and display materials is another important function. Organizations so serviced during the biennium included Lions International, Kiwanis International, Junior Chamber of Commerce and many others. Advance mailings were undertaken for a number of national conventions holding their meetings in the State.

These Special Projects totaled 505. 174,898 pieces of literature were required to

service them.

The Tar Heel lapel pins and Tar Heel neckties were designed by the Advertising Division with the cooperation of the N. C. State College School of Textiles for the industrial missions, and public relations services were provided on these missions. Two tours of travel editors and counselors, one of the mountains and the other ta

the coast, where conducted in cooperation with the Carolina Motor Club. One of these was the "Land-Sea Cruise" to the Outer Banks and Northern and Central

Coastal Plains, April 26-May 2, 1959.

The Division's staff assisted with arrangements for meetings of Honorary Tar Heels at Lake Logan and Cape Hatteras, and cooperated with the Hatteras Marlin Club in staging the first international blue marlin tournament at Hatteras. A special project was worked out with the Denison-Johnson Corp., manufacturer of fishing reels, for publication of a display ad featuring North Carolina and production of a fresh water fishing movie in which North Carolina will share top billing with two other states—Wyoming and Minnesota. Color photographs and lay-out materials for the State Highway map were also supplied by the Advertising Division.

SERVICE TO INDUSTRIES

Increasingly, North Carolina industries are requesting services of the State Advertising Division. Western Electric at Winston-Salem and Olin Mathieson at Pisgah Forest used our literature extensively during this biennium in their professional recruitment program. Chemstrand used our publications for orientation of employees moved to the Research Triangle from Alabama. Westinghouse, General Electric, DuPont, American Enka, Lithium Corporation of America and others are heavy users of Advertising literature and display materials in providing vacation information to their employees. This type of distribution is relatively new, but it is effective and justifies increased printing production that it entails.

COOPERATIVE ENTERPRISE

Another new type of distribution of our printed matter was begun during the biennium, and it is working out very well as a cooperative project with the State Highway Commission. The Highway Commission built special racks on all its ferries and keeps them stocked with vacation information supplied by the Advertising Division. The highway map, on which the Advertising Division cooperated with the Highway Commission by supplying illustrations and artwork, is also a popular item in this distribution.

The Advertising Division worked with the U.S. Information Agency and the National Association of Travel Organizations in producing North Carolina folders especially designed for foreign distribution during "Visit USA Year". This is a long range project, but the potential for foreign travel to North Carolina appears so good

that we feel this program should be continued.

"LIVING IN NORTH CAROLINA"

The cooperative arrangement with the North Carolina Association of Realtors was continued with increasing momentum during the biennium. 16,183 inquiries resulting from advertisements about retirement living in North Carolina were serviced with general literature about the State, including an especially prepared brochure entitled "Living in North Carolina", and the inquiries were then referred to the real estate association, which circulated them to realtors throughout the state through a special bulletin. An increasing number of specific property sales directly traceable to this campaign were reported. All travel advertising and some industrial advertising generated "living" inquiries. In addition, some specific retirement copy was run in publications including NATIONAL GEOGRAPHIC, WALL STREET JOURNAL, CHRISTIAN SCIENCE MONITOR and ARMY, NAVY AND AIR FORCE TIMES.

SOURCE MATERIAL

The Advertising Division is a major source for current reference materials about the State, both by encyclopedias and yearbooks and by writers for newspapers and magazines. Among the reference books to which the Division supplied text and illustrations were the INTERNATIONAL YEARBOOK, ENCYCLOPEDIA BRITAN-NICA, WORLD ALMANAC, COMPTON'S YEARBOOK, INFORMATION PLEASE, BOOK OF KNOWLEDGE, STATESMAN'S YEARBOOK (London), BLUE BOOK OF SOUTHERN PROGRESS and Fifth District Federal Reserve Bank BULLETIN.

TRAVEL COUNCIL

The Travel Council of North Carolina, organized by a special committee from the travel industry appointed by Governor Hodges in 1955, cooperated closely with the Advertising Division and rendered invaluable assistance by assuming the responsibility for projects beneficial to the promotion and development of the multi-million dollar travel industry. These include the economic survey of the travel industry directed by an out-of-state authority which for the first time developed authentic statistics on the travel-serving industry in North Carolina and revealed its dollar volume for 1959 at \$775 million dollars to make it the third largest industry in the state. Other major Travel Council projects conducted in cooperation with the Advertising Division were: The "Travel Bulletin" issued periodically with a circulation of approximately 3,500 to a mailing list including the press and all segments of the travel industry in the State; "Keep North Carolina Beautiful" (the anti-litterbug campaign), the "Host Schools" for training travel-serving personnel, and "See North Carolina Month" observance. The Council, being a non-stock, non-profit corporation operating on a very low overhead, depended heavily on the Advertising Division for staff work. The arrangement was both cordial and increasingly beneficial to the travel industry.

COMMERCE AND INDUSTRY

In prospective new jobs, capital expenditures committed, and indicated new payrolls, the biennium of 1958-60 was the greatest on record in North Carolina, according to figures compiled by this Division.

New plants and expansions during the two-year period indicated that a total of 64,567 workers would be required for their operation. The payrolls for these jobs

were estimated ot a total of almost \$210,000,000 annually.

Capital expenditures committed for the new and expanded plants amounted to some \$503,876,000, exceeding the next highest biennium by well over one hundred million dollars, the previous high being \$381,880,000 in 1956-58.

The biennium also set a record in the number of projects, new and expansions. The total for 1958-60 was 1,057 os compared with 668 for 1956-58.

Summarized below are total proposed new and plant expansion figures for the bienniums 1958-1960 and 1956-1958.

BIENNIAL SUMMARIES 1958-1960; 1956-1958

	New	Investments	Payroll	Employees
1958-'60	423	\$252,532,000	\$124,391,000	38,448
1956-'58	337	206,932,000	72,063,000	22,843
	Expansions			
1958-'60	634	\$251,344,000	\$ 85,442,000	26,119
1956-'58	331	174,948,000	40,931,000	13,303
	New and Ex	(pansions		
1958-'60	1,057	\$503,876,000	\$209,833,000	64,567
1956-'58	668	381,880,000	112,994,000	36,146

Utilities expanded during 1958 and 1959 by expenditures of opproximotely \$250,000,000. These completed utility projects and their costs are not included in the above manufacturing totals for the biennium.

All tobulations in this report are based on the U.S. Department of Commerce

S. I. C. codes.

Outstanding gains over the 1956-58 totals were made.

Percentage Gains 1958-'60 over 1956-'58

No. projects (New and Expanded) 58.23% Investments (New and Expanded) 31.95% Payrolls (New and Expanded) 85.70% Employees (New and Expanded) 78.62%

The following table presents biennium data on the ten leading industrial classifications (not including Miscellaneous reporting:

NEW AND PROPOSED, AND EXPANDED INDUSTRIES 10 Leading Classifications, Biennium 1958-1960

Classification	New	Number W Ex	er Exp	Investment (+ 000) New Exp	Payroll (+ 000) New Exp	Emp	Employees New Exp
Textile Mill Products Totals	80 283		203	\$68,241 \$138,906	\$45,109 \$71,209	13,978	22,413
Chemicals & Allied Products Totals	25 4	48	23	\$76,955 \$15,968	\$12,474 \$16,435	2,575	3,577
Tobacco Mf. Totals	₹ Z	8 8	∢ Z	\$10,000 \$ 66,668	\$ 2,170 \$ 9,582	572	3,252
Metalworking Totals	69 13	138	69	\$31,520 \$ 58,344	\$22,915 \$32,070	6,478	9,095
Stone, Clay, & Glass Totals	19	4	25	\$29,206 \$ 53,684	\$ 4,839 \$ 9,467 \$ 4,628	1,429	2,413
Furniture & Fixtures Totals	59 14	143	84	\$ 8,340 \$ 22,811	\$ 9,873 \$ 8,851	3,221	6,129
Apparel & Finished Goods Totals	48 10	801	09	\$ 9,873 \$ 16,878	\$16,427 \$ 28,311	6,662	11,367
Food & Kindred Products Totals	33 10	00	67	\$ 8,322 \$ 15,479	\$ 3,024 \$ 5,372	1,123	2,164
Paper & Paper Products Totals	9 2	21	12	\$ 738 \$ 15,137	\$ 1,116 \$ 6,375	311	828
Lumber & Wood Products Totals	33 7	17	38	\$ 4,132 \$ 7,912	\$ 2,229 \$ 1,571	769	1,441

From the attached tabulation of new and expanded figures for the two fiscal years, 1959-60; 1958-'59 and the biennium, it will be seen that textiles occupy first place in all classifications listed, except for new investments, which fell to chemicals. The "NA's" in the tabulations indicate projects too small in number to list for fear of revealing individual company figures.

Some of the new names added to the North Carolina list of manufacturers during the biennium are as follows: E. Ingraham; Fletcher-Southern, Inc.; Crown Aluminum; Gilson Brothers; AMP, Inc.; Duff-Norton Company; Proctar & Schwartz; Tenney Engineering, Inc.; Republic Foil, Inc.; and C. M. Hall Lamp Company—all in the metalworking field.

Others in various classifications include: Ball Brothers and Laurens Glass Works; Gerber Products Company; Reasor Chemical Corp.; Amcel Propulsion, Inc.; Chemstrand; Samuel Hird & Sons; Glenoit Mills, Inc.; B.V.D. Company; Gibbs Underwear; Filatex Company; and proposed plants by Ideal Cement Company; and Dixon-South-

ern Chemicals, Inc.

ADMINISTRATION

During the period for which this report is written the previous trend of rapid turn-over in the administrative head of the Division continued. Three Industrial

Development Administrators have served during the two years.

William R. Henderson, the current occupant of the position, assumed office on September 15, 1959. Others serving in the same capacity were Walter W. Harper, who resigned to become Director of the South Carolina Development Board on July 31, 1959. H. P. Cotton succeeded Mr. Harper but served only until September 15 when he became Assistant to the President of the Norfolk and Western Railroad in charge of its industrial development program. Both Mr. Harper and Mr. Cotton began their careers in the field in which they are now engaged with the Division of Commerce and Industry.

In addition to the rapid turn-over in the administrative staff, there has also been during the biennium a considerable number of changes within the staff. G. F. Albright, formerly head of the Small Industries Section, currently the Community Development Section, went to South Carolina to take over the similar work under

the direction of Mr. Harper.

Reorganization of Division—In order to attempt to increase the efficiency of the operations of the Division, a plan for more definite organization was carried out soon after the assumption of the office of the Industrial Development Administrator by Mr. Henderson. This also involved the enlargement of the scope of the operations

of certain of the functions of the Division.

The sections created within the Division were General Development, Community Development and Research and Statistics. One of the most important functions given more emphasis by the reorganization of the Division was service to existing industry and also more specific cooperation and assistance to the communities in their industrial programs. These activities are covered more fully in the sections of this report devoted to the various sections. Also, additional facilities were made available to the Research and Statistics Section, including enlargement of the site study program and the general facilities for research and development.

During the latter part of 1959 and early in 1960, a ten point program to

strengthen and expand the activities of the Division was proposed by the Industrial

Development Administrator and approved by the Board.

These features included the continuation of the group industry hunting trips to the major industrial centers of New York, Chicago, and Philadelphia; regional development seminars; a staff training school; the construction of two display panels for use within and outside the State; and several others.

One of the pleasing developments of the biennium has been the increase in the

number of full time industrial development representatives in the communities.

At the beginning of this report period, 14 communities were organized with full time representatives employed for the special purpose of attracting industry. During the two years, five began these programs and four others were organized but had not filled the positions, making a total of 23.

The Division extends its full cooperation toward the creation of these local agencies and works closely with the various organizations after they are in operation. Efficient local programs add materially to the effectiveness of the State's development

activities and a strong State program helps the local activities, since each supplements the other.

GENERAL ADMINISTRATION

Industry Hunting Trips-Two industry hunting trips were carried out during the biennium. These were to New York and Philadelphia. Preparations were underway for another—to Chicago—at the end of this report period. The latter mission was planned for the month of September but was postponed until the first week in

With the completion of the Chicago mission, five trips of this nature will have been carried out by the Division, two each to New York and Chicago and one to

Philadelphia.

Each of these missions has been led by Governor Hodges. Arrangements were carried out in the Dept. of Conservation and Development. Representatives of the Department were joined by other representatives of the State, communities, and private business ranging in number from about 50 to 115. Expenses of the trips were paid by the various organizations represented. Every member of the various teams, however, represented the State at large.

As a result of these trips, the attractions of North Carolina were brought to the personal attention of top executives of hundreds of the highest ranking manufacturing firms in the country, including many with which the Division had previously been working on side studies. Numerous new prospects for new industries have been devel-

oped. These contacts are expected to bear fruit over a period of years.

European Trade and Industry Mission-Sixty-eight North Carolinians, headed by Governor Hodges, crossed the Atlantic during the period October 31-November 15,

1959, in the interest of trade and industrial development.

This mission was said by U. S. Government agencies to have been the first state-sponsored undertaking of its character and scope. The Tarheels carried the "North Carolina Story" directly to some 1,600 business leaders in ten cities in England, The Netherlands, Germany, Switzerland, France and Belgium.
A total of 276 of these Europeans indicated a definite interest. Of these, 79

showed an interest in the State's ports; 12 in the Research Triangle; 26 in manufacturing; 41 in sales or similar arrangements; 7 in the production of various items under

licensing agreements; and 83 general with no particular fields specified.

European Follow-up Mission—A follow-up mission to Europe, making possible more specific conferences with companies expressing an interest in the State during the original trip was carried out on March 13-April 29, 1960.

This mission was directed by J. Edgar Kirk, Assistant Director of the Department, with Voit Gilmore, a member of the Board, J. Henry Dowdy, Robert D. Higgins, Jr., and J. M. Wasson, participating as volunteers. Others who made the trip later and who contributed by development calls on behalf of the State included the Hon. E. J. Evans, Mayor of Durham, Watts Hill, Jr., and Dr. John F. Lee.

Although normally immediate results would not be expected, it is pleasing to report that some were evident within a few months. For instance, one of the German firms called on, Pleuger Submersible Pump Co., had a North Carolina plant under construction around the close of the biennium. It is expected to be in operation

before the end of 1960.

Two of the chemical firms visited have optioned sites in North Carolina, one for manufacturing purposes. A machinery company currently doing business in the State is acquiring property for expansion. Other European manufacturers have definitely scheduled trips of inspection to the State for the purpose of considering

the establishment of various types of operations.

A word of appreciation should be extended to the U.S. Departments of State and Commerce which cooperated wholeheartedly with the missions. The North Carolinians who contributed so importantly to the project by contributing their time and efforts and defraying their own expenses deserve an expression of aratitude.

RESEARCH AND STATISTICS

During the 1958-60 Biennium significant advances were made in many areas of the State in the collection and more effective presentation of industrial development

information. There still remain, however, communities and sections of North Carolina where little or nothing has been accomplished in the first, and one of the

most important segments of the development program.

The Research and Statistics Section of the Division, has been shorthanded in trying to promote a fuller and more active role by local development agencies-particularly in the field of local survey preparation. Greater and more effective work will now be possible under the joint attack on this problem by this Section and the Community Development Section.

In time the efforts of the Division and of local development groups - cooperating on a planned program to assemble necessary data in all parts of North Carolinashould equip every community to compete for new and expanding industries. Major

emphasis during the next several years will be given to this program.

With the rapid growth in recent years of diversified manufacturing in North Carolina, and the general technological advancements which have opened up new and spectacular fields of industrial endeavor, it is believed that the time has come for a reappraisal by our State of its opportunities and potentials in the

decade on which we have now embarked.

The Research and Statistics, because necessity has required it, devotes a major part of its efforts to the preparation of current data for industrial prospects being handled by the Field force and of other agencies likewise engaged. This work should not be curtailed, and many have to be enlarged as conditions require. However, the Section feels strongly that a general study, under its sponsorship and direction, should be made by some qualified engineering firm to point up these new and more significant opportunities and potentials, which in turn can be valuable guideposts in the over-all industrial program.

In the above connection, the component and parts survey made in 1958 by N. C. State College under the Section's sponsorship, covering the electrical machinery and equipment industry in North Caralina, is an excellent example of individual

studies which may be developed from a broad general survey.

It is felt that similar surveys should be made in the Chemicals, Foodstuffs, General Metalworking and other standard classifications. A general study, however, should reveal facts to indicate in what order these separate studies should be made, the amount of time and effort required, and show some details on the best approach and survey procedures needed.

The Section has underway at this time plans to revise completely the standard "Industrial Location Factors" brochure. The present brochure, rewritten several times with no major changes being made in its contents and format, was initially

issued in 1957.

Industrial site studies prepared by the Section have been greatly improved especially in appearance and data presented. Although emphasis has continued on the larger surface water sites, the Section has expanded its work in this field to include local industrial park areas and larger potential acreages in and near communities nat immediately adjacent to major streams ar rivers.

COMMUNITY DEVELOPMENT

As of January 1960, the Community Development Section came into being. Previously, its personnel had been members of what had been the Small Industries Section.

With its new name, came new fields of work. In addition to assisting the communities in the development of new local industries, the Section has two new and important functions. These are, (1) Working with communities in a program of Community preparation for industrial development, and (2) working with existing industries in an effort to prove to them that the State is as concerned with their continued success as with those new industries moving into the State. This is a service job, asissting industry in new markets, new praducts, raw material supply, component supply, expansion, and in other services, particularly those related to State functions.

The work of the Section in new industry development goes on. During the past biennium, many community groups and individuals have been assisted in their efforts to establish new local manufacturing or proposed plants. Several af these proposed plants are now in operation and others will follow. Among the new firms now in business, either as a result of direct or indirect assistance by staff members, are firms providing the following: quartz aggregate or precast building

slab, peanut blanching, metal stampings for furniture and electronics, starch, hydraulic scaffolds, frozen food, processed poultry, processed seafood, fruit

juices, pumps, bank supplies, and several other products and services.

During the biennium just passed, 216 new locally developed industries were established in North Carolina. Many are in production and the remainder are either under construction, or in the planning stage. These new industries represent an initial investment of \$26,366,100 and employment for 7,825 people. These new plants are located in all sections of the State, and manufacture a wide variety of products.

Other than working directly with the establishment of new local industry, personnel of the Section has been assigned to work that is pertinent to over-all development

program of the State.

One staff member was chosen to assist in coordinating the Trade and Industry Mission to Europe in 1959. In this connection he made two trips to Europe - once in preparation and again with the full group. In addition, he was instrumental in the decision of the Pleuger Submersible Pump Company of Hamburg, West

Germany, to locate a plant in Statesville.

Four Industrial Development Conferences, held in four locations across the State were planned and carried out by the Section. These were in Goldsboro, Raleigh, Salisbury, and Asheville. These were considered as highly successful and were attended by approximately one thousand persons interested in industrial development.

While carrying out their regular duties, it often became necessary for members of the staff to be assigned work with out-of-state industrial prospects. Plants locating in North Carolina over the biennium with which staff members worked, represent an initial investment of \$13,175,000 and employment for 512 people.

As far as the newly assigned work of the Community Development Section is

concerned, it is progressing nicely. One staff member has been assigned to the job of service calls on existing industry. During the two months of the biennium that he has held the assignment he has called more than 67 firms. The results achieved so far bear out the importance of this service.

COMMERCIAL FISHERIES

Despite numerous handicaps such as hurricanes, long periods of other types of unfavorable weather and other factors, North Carolina's commercial fishing industry ended the 1958-60 biennium on a brighter financial side than it did for the preceding biennium.

In dollar value the fishermen for the shellfish, food fin fish, and menhaden they took from North Carolina controlled waters, the total for the 1958-60 period was \$15,451,894 compared with \$15,046,380 for the preceding biennium.

Sharp increases in all species of shellfish except shrimp were made during the 1958-60 biennium to help boost the dollar value to fishermen. A sharp increase was also noted in the catches of menhaden, a species of fish caught by the millions

in North Carolina waters and used for industrial purposes.

Catches of food fin fish during the 1958-60 biennium were almost on a par with those for the 1956-58 biennium, but in dollar value to fishermen was considerably under the amounts received during the 1956-58 period. The dollar value of food fin fish during the 1958-60 biennium was \$3,641,488 compared with \$4,166,555 for the preceding biennium.

The sharp increase in oyster production during the two-year period was most encouraging to those who are working to help make this facet of the State's

seafood industry to reach even greater potentials.

Almost 100,000 more tubs of oysters were taken from North Carolina waters

during the past biennium than were taken during the 1956-58 biennium.

This increase in oyster production is attributed in large measure to increased emphasis being placed on efforts being made to rehabilitate the State's oyster industry under the Oyster Rehabilitation Act passed by the 1947 General Assembly and under which seed oysters and used oyster shells are planted annually in areas known to be most favorable for growth of this species of seafood.

Liberal appropriations made by the General Assembly have been of increasing

benefit in this oyster rehabilitation program. Services rendered by the Institute of Fisheries Research under the direction of Dr. A. F. Chestnut are of mounting benefit and importance to the entire seafood industry of the State. More efficient methods of growing and harvesting of oysters are being employed by the industry.

Dealers, oystermen, and others interested in and working for the further development of the commercial fishing industry of the State in general are of the opinion that this rehabilitation program augurs well for the future of oyster production. Also, and largely as a result of, the fact that North Carolina now ranks third among states on the Atlantic Seaboard in oyster production is attributed to the rehabilitation program.

Also of mounting importance to the State's seafood industry is the steady rise in production of hard crabs. This is a fast growing business in North Carolina. Several plants along the coast are now engaged in processing fancy grades of crabmeat which is shipped outside the state for the most part and which brings good prices. It is also an industry that is providing an increasing number of jobs

to men and women in the State's coastal area.

Some indication of the growth of the hard crab industry is seen in the fact that during the 1958-60 biennium a total of 22,871,315 pounds of hard crabs were taken from State-controlled waters compared with 14,226,000 pounds the

preceding biennium.

Production of clams is also on the increase. During the past biennium 79,069 bushels of clams were taken from State waters against 54,429 bushels during the preceding biennium. As a result of research programs carried on by the U.S. Bureau of fisheries, a big bed of Bay Quahog clams was found during the past biennium off the coast. Its discovery caused renewed interest to be shown in the clam industry. Efforts are being made to discover other clam beds.

Growth is also being shown by the escallops industry. There was an increase of 3,650 gallons of escallops during the biennium over the preceding one. A bed of calico escallops was found off the State's coast for the first time, thus accounting

in large part for the increase in production of this species of seafood.

However, ocean escallops can only be taken in very cold weather and each boat has to be limited to its catch. The U. S. Fish and Wildlife Service has an improved method of taking the meats from escallops and the dealers are looking

for new markets for this delicious seafood. The bay or inside escallop production became almost extinct a few years ago because the grass on which the spat clings was for some mysterious reason completely destroyed in inside waters. However, production of the bay escallop has been showing some improvement as the eel grass becomes more abundant.

Least active during the biennium was the soft shell crab industry. It is an industry limited in scope because the dealers are in operation only about five weeks before the competitive markets of Virginia and Maryland open. However, there was an increase of 11,000 dozen soft crabs during the biennium over the

preceding one.

The production of menhaden showed a great increase despite curtailment of operations in the Fall of 1959. This industry is likely to be somewhat inactive unless some relief is given from the competition of fish meal import from foreign countries.

Stormy and cold weather are believed to have been largely responsible for the drop

in shrimp production.

More than ? ? ? are licensed to carry on commercial fishing activities in State-controlled waters. This is an increase of over the preceding biennium.

It is a matter of noteworthy importance to all who eat and enjoy North Carolina seafood to know that the U.S. Public Health Service has been giving its high rating of more than 95 per cent in its annual evaluation of the over-all shellfish sanitation program carried on in North Carolina. One year North Carolina was given the highest rating of any of the Atlantic Coast States in the shellfish sanitation rating of its oyster houses.

Due credit for this highly favorable condition should be given the North Carolina State Board of Health and its sanitation engineers, who work out of headquarters of the Division of Commercial Fisheries at Morehead City. These men have been very helpful in the shellfish industry by furnishing blueprints to fit their particular needs, interpreting of shellfish regulations, and periodic checking of fish houses.

Constant efforts are being made to enforce the commercial fishing rules and

regulations without fear or favor.

KIND, QUANTITY AND VALUE OF FISH TAKEN IN WATERS OF NORTH CAROLINA

For the period July 1, 1958 to June 30, 1960

Kinds of Fish	No. Pounds	Value to Fishermen
Bluefish	1,281,797	\$ 152,384
Butterfish	791,553	61,731
Cabio	23,039	1,383
Carp	661,890	19,857
Catfish	2,271,742	220,140
Croakers	6,297,858	465,827
Black Drum	41,394	2,483
Red Drum	11,782	1,078
Eels	. 169,791	6,784
Flounders	2,520,964	305,952
Grouper	14,641	1,046
Herring, Thread		50,704
Herring		269,686
Hickory Shad		16,895
Jewfish		44
King Mackerel		17,521
King Whiting	· ·	128,259
		620
Mackerel, Boston	•	
Mullet		365,181
Pigfish		7,302
Pike or Pickerel		13
Pompano	. 19,108	5,732
Sand Perch	119,372	3,582
Soup or Porgy	100,208	8,013
Sea Bass	86,813	8,681
Grey Trout		371,449
Spotted Trout		150,333
Shad	•	231,529
Sharks	•	753
Sheephead		834
Red Snapper		5,615
Spade Fish		478
	•	
		49,836
Spot	, ,	287,832
Striped Bass		341,354
Sturgeon	•	6,145
Suckers	. 700	28
Swellfish	. 505,218	15,157
Tilefish	. 300	28
White Perch	797,464	55,172
Yellow Perch	. 58,434	4,047
Total of Food Fin Fish	68,086,023	\$ 3,641,488
Menhaden (No. of Fish)	734,946,129	6,971,074
Methodeli (140. Of Fish)	734,740,129	· · · · · · · · · · · · · · · · · · ·
		10,612,562
Oysters 430,007	(Bu. tubs) 5 pk.	1,290,021
Clams 79,069	(busheis)	213,486
Soft Shell Crabs 30,626	(dozen)	45,939
Escallops '	(gallons)	114,275
Hard Crabs22,871,315	(pounds)	1,029,209
Shrimp	(Pounds, heads off)	2,146,402
Total Value of She	:III ISN	\$ 4,839,332
Value of Fin Fish		10,612,562
Total Value of Wa	ter Products	15,451,894

COMMUNITY PLANNING

The primary function of the Division of Community Planning is to provide towns, cities and counties with the technical assistance needed for the solution of their physical, social and economic problems through planning. Assistance is given in the development of plans for land use, streets, parking, central business districts, parks, recreation, schools and other community facilities; in drafting zoning and ordinances, subdivision regulations and other legal tools needed for the implementation of plans; in studies of population, fiscal conditions and economy; and, in the provision of continuing technical assistance needed by municipal and county officials as they attempt to carry out the recommendations of comprehensive community plans.

THE NEED FOR COMMUNITY PLANNING

The need for sound community planning is evident in our growing traffic congestion, the deterioration of residential areas by improperly located commercial or industrial activities, the cancerous growth of slum and blighted conditions, the decline of the central business districts, the rapidly increasing cost of municipal services, and the inadequate provision of land for parks, schools and other public uses. The great majority of North Carolina communities, like most American communities, have grown without the benefit of adequate plans to guide development. Fortunately, North Carolina is still a State of small communities and we can avoid the tragic and costly mistakes which have been made in the large metropolitan

concentrations in other sections of the country.

Perhaps no other state contains so many small incorporated places or has more population living in communities of under 50,000 persons. These communities are one of North Carolina's great assets and they are becoming increasingly attractive to people, business and industry now located in overcrowded metropolitan centers. At the present time, there are 415 incorporated communities in North Carolina. According to the 1960 Census, 210 of these communities, or approximately one-half, had populations in excess of 1,000 persons; 59 communities had populations in excess of 50,000 persons, and only seven municipalities had populations in excess of 50,000 persons. While the typical North Carolina municipality is small, it is also experiencing a rapid rate of growth. Between 1950 and 1960, almost 90 percent of North Carolina's total population increase took place in the 210 communities having populations of more than 1,000 persons. During the past decade, the combined populations of these communities increased 29.8 percent while the population of the remainder of the State increased only 1.3 percent.

DIVISION'S PRIMARY RESPONSIBILITY TO SMALL COMMUNITIES

The seven municipalities in North Carolina having populations of more than 50,000 persons have created planning departments staffed with professional planning personnel to assist in the increasing problems of urban growth. The smaller towns and cities do not have the financial resources to employ full time professional planning staffs although their planning needs are not less acute than those of their larger neighbors. Therefore, the Division maintains a trained staff which provides professional planning services to the smaller towns, cities and counties at a reasonable cost. Individual staff members of the Division may work with several communities, thus, reducing the overall planning costs for the individual community far below that which would be incurred if they employed their own full time planning staffs.

FEDERAL PLANNING GRANTS TO MUNICIPALITIES AND COUNTIES HAVING POPULATIONS OF LESS THAN 50,000 PERSONS

The Division of Community Planning has been authorized to act in behalf of towns, cities and counties in obtaining Federal planning grants covering up to 45 percent of the cost of certain eligible planning projects. These Federal planning grants are not made directly to the local governments but are made to an authorized state planning agency. The towns, cities or counties receiving aid from the planning grants also pay their share of the planning costs to the state planning agency.

This state planning agency, which in North Carolina is the Division of Community Planning, is then responsible for the expenditure of the Federal and local funds and for the provision of adequate planning services to participating local governments. These Federal planning grants, authorized under Section 701 of the Federal Act of 1954, as amended, are available to aid in the cost of: (1) making studies of population, economy, land use and traffic; (2) preparing long-range plans for future land use, thoroughfares, central business districts, schools, parks, recreation and other community facilities; (3) preparing related ordinances such a zoning and subdivision regulations; and (4) preparing public improvements programs establishing the priority of need for the various public improvements proposed in the long-range plans.

AREA PLANNING OFFICES

The individual small town or city cannot support the cost of maintaining its own professional planning staff but by pooling its resources with those of neighboring communities, a joint planning staff can be financially supported. In order to encourage the smaller towns and cities to initiate and support effective planning programs, the Division of Community Planning will establish Area Planning Offices staffed with professional planning personnel to provide assistance to any community or group of communities agreeing to pay for the cost incurred. These Area Planning staffs would act for the smaller communities in much the same manner as the planning departments in the larger municipalities. They would be available to provide continuing planning assistance to the smaller municipalities, not only to assist in the preparation of plans but also to provide technical assistance needed by municipal officials for the solution of day-to-day problems affecting the physical development of the community. The establishment of Area Planning Offices is the result of an increasing realization among municipal officials that planning should be a permanent function of local government. This is especially true in periods of rapid urban change and growth. The completion of a comprehensive plan provides the framework for decisions about the desirable development of the community, based upon the best available knowledge of population growth, economic potential, and land use trends within the community. But the plans have little value unless a continuing community planning program is maintained to insure that decisions affecting the physical development of the community are made within the framework of the plans and within the financial capacity of the community. Since many technical questions are involved, municipal officials need professional planning assistance available to them on a continuing basis. Such assistance will be available to those towns, cities, and counties who share in the financial support of the Area Planning Offices of the Division.

The Division's first Area Office was established in Salisbury in September, 1960, and is now adequately staffed to provide planning services to municipalities and counties in that section of the State. Negotations are now underway for the establishment of a second Area Office in Kinston to serve communities in that area. As more communities participate in the support of these Area Offices, additional staff members can be added thus providing a wider range of professional planning

skills.

COMMUNITIES RECEIVING PLANNING ASSISTANCE

The Division's staff has assisted large numbers of communities and counties throughout the State by analyzing their planning needs, recommending suitable planning programs and making applications for Federal grant funds. The most important work of the Division, however, has been in making basic studies of communities, preparing long-range development plans, and preparing implementing measures such as zoning ordinances, subdivision regulations, public improvements programs, and related planning work. Municipalities and counties which have engaged the Division to perform such technical planning work include:

1.	Canton	13.	Henderson	25.	Parkton
2.	Carteret County	14.	Highlands	26.	Raeford
3.	Cary	15.	Hickory	27.	Roanoke Rapids
4.	Chapel Hill	16.	Jacksonville		Rockingham
5.	Conover	17.	Kinston	29.	Rocky Mount
6.	Clinton	18.	Laurinburg	30.	Rowan County
7.	Elizabeth City	19.	Maxton	31.	Selma
8.	Forest City	20.	Mocksville		Salisbury
9.	Franklin		Mooresville	33.	Spencer
10.	Goldsboro	21.	Mount Airy		Wilmington
11.	Graham	23.	Mount Holly	35.	Wilson
12.	Havelock	24.	New Bern		

FUNDS RECEIVED FROM FEDERAL GRANTS AND FROM LOCAL GOVERNMENTS

The Division receives State appropriations to cover part of its administrative costs but the largest part of its budget is derived from payments made by communities and counties receiving planning assistance and from Federal grants. Since 1958, receipts from communities and counties total \$154,048, and receipts from Federal grants total \$158,090. Combined receipts from both sources amount to \$312,138.

DIVISION OF FORESTRY

The Forestry Division, often called the State Forest Service, is designated by State law to "have charge of the work of forest maintenance, forest fire prevention, reforestation, and the protection of lands and water supplies by the preservation of forests, etc." The State law also carries specific authorization "to arrange for and accept such aid and cooperation from the several United States Government Bureaus and other sources as may assist in carrying out the objectives of the Department." This forestry program covers the following broad activities:

Bureaus and other sources as may assist in carrying out the objectives of the Department." This forestry program covers the following broad activities:

1. Forest Fire Control—Administered by the Forestry Division in financial cooperation with the several counties and the U. S. Forest Service. The outstanding achievements in Forest Fire Control during the biennium were the effective use of the Statewide Forest Fire plan which entailed employment of cooperating agencies on large fires. Of particular note was the excellent assistance provided by the Marines, Prison Department and industry in supplying manpower and equipment.

The conversion of two surplus Navy planes for chemical or water dropping of fires will lend invaluable assistance particularly on fires in inaccessible areas.

With the addition of four counties in the cooperative forest fire system this brings the total to 92, the largest number since the initiation of the program. Currently 92 of the 100 counties are thus under cooperative fire protection by the State. The Division conducts the work in the counties through its salaried full-time County Ranger or County Forester, who reports directly to one of 13 District Foresters. The Division owns and operates 144 forest fire lookout towers, six airplanes, its own radio communication net, and a considerable amount of forest fire fighting equipment, consisting of tractors, fire plows, specially equipped trucks, etc.

2. Forest Management Advice and Service—The public demand for this in the field service is attested to be the fact that on June 30,1960, there were over 2,300 landowner requests on hand for forestry assistance. The Division has a currently authorized strength of 65 graduate Foresters. Some are assigned largely to the fire control program, some to the forest nurseries - reforestation and some to forest management service. But all foresters of the Division are available for the vital work of advice and service, under certain conditions, to forest owners and operators in the management of forest land. All Forest Rangers of the Division are likewise available as sources of information on both forest management and reforestation.

3. Forest Tree Nurseries and Reforestation—The Division operates four State forest tree nurseries, one in each of the following counties: Johnston, Henderson, and Burke

and Burke

The forest tree distribution for the biennium planting season was 181 million seedlings. These seedlings are sold at approximately the cost of production for forest and windbreak planting at varying prices, \$5.00 per thousand f.o.b. destination for the several species of pine.

4. Information and Education—There is available considerable literature on forestry, most of which is free upon request to the Information Officer of the Department. This literature is particularly valuable to teachers, pupils, etc.

5. Administration of State Forests—Thus far, the State owns and operates only one State Forest, the 35,000 acre Bladen Lakes State Forest in Bladen County. It is administered by the Division and is an excellent example of the management of low value land under good forestry practices. Since 1939 when the State obtained control of this sub-marginal agricultural area, the Division of Forestry has operated the property as a forest unit and increased its book value at least sevenfold.

6. Forest Tree Insect and Disease Control—Continuous efforts to control the oak wilt disease in western North Carolina have been undertaken and other epidemics of the pine sawfly, elm spanworm, and balsm wooly aphid are being studied and action planned. The southern pine beetle epidemic of 1957 in the mountain section

of the State is now considered under control.

FOREST FIRE CONTROL

Material progress has been made in reducing the fire losses in North Carolina except for the sa-called ground burning area which embraces appraximately two

million acres in the Coastal Plain. Fires in this particular type are extremely difficult to extinguish under certain conditions due to the ground cover and inacessibility.

This continues to be the number one forest fire problem in North Carolina.

Four large fires occurred in this ground burning area, two in the April-May period of 1959 and two in the same period of 1960. The largest of these was the Ponzer-Pungo fire of 1959 burning about 24,700 acres, followed by the Phelps Lake fire of 1960 which burned about 14,000 acres. The Hales Lake fire of 1959 burned about 11,900 acres in the Dismal Swamp area north of Elizabeth City and the Piney Woods fire of 1960 burned about 12,500 acres in the area northwest of Lake Mattamuskeet.

All four of these major fires burned in highly inaccessible areas under explosive fire weather conditions. Water dropping planes from the Georgia Forestry Commission and the U. S. Forest Service were used on three of them, Marines from Camp Lejeune on two of them and considerable Prison labor on all of them. Cooperation from the Marine Corps, Coast Guard, Prison Department and Forest

Products and other landowners was most excellent on these fires.

Progress is being made on basic and equipment development research in this ground burning area under cooperative arrangements with the U. S. Forest Service and industry. A large percentage of the area burned in the State is accounted for by a few large fires in this particular type.

The Fire Control organization placed two water dropping planes in operation in June of 1960. These planes were converted and equipped from Government surplus military planes, and represent a major addition to the Division's fire fighting

equipment.

The Federal Government under the provisions of the Clarke-McNary Law continues its financial cooperation with the State. The amount of Federal funds made available to the State under this law depends primarily on the State Appropriation for Forest Fire Control and the State maintaining its relative position with other States in appropriation for Forest Fire Control. Reductions in Federal allotment to this State during the past two years have resulted from failure of this State to maintain its relative position with other States in Fire Control appropriation.

Present Organization

The State is organized into four Forestry Regions, these being the Lower Coastal, Upper Coastal, Piedmont and Mountains. All but the Mountain region has a Regional Forester in charge who supervises four District Forest field supervisory offices in the Lower and Upper Coastal Plain Regions and two in the Piedmont Region. The three Mountain Districts having no Regional Forester work directly under the Raleigh Office. Each of the 13 District Forest field supervisory offices is in charge of a District Forester who supervises the work in the area of from about 1 to 2 million acres of timberland involving from 4 to 10 counties depending on size. The District Foresters have 1-4 supervisory assistants. There were 91 counties cooperating with the Forestry Division as of June 30, 1960 and an additional one, making 92, initiated cooperation as of July 1, 1960.

State Plans

The State Forest Fire Plan for large project fires, involving cooperation with the Highway and Prison Departments, other State Departments, Marine Corps at Camp Lejeune, industrial and other forest landowners was used on 6 project fires with excellent cooperation and results. Additional assistance was secured from the Georgia Forestry Commission and the U. S. Forest Service in furnishing a water dropping plane on three of the largest fires through an invocation of the Southeastern States Forest Fire Compact Commission.

Training Schools in large fire organization and suppression have been held each year in the Lower Coastal Region in cooperation with forest industry and other landowners and the Marine Corps. A cooperative fire suppression agreement with the Marine Corps is a part of the above mentioned State Fire Plan. In addition, similar training schools in large fire operations have been held in the Upper Coastal Region and the Piedmont Region in cooperation with the Wildlife Commis-

sion and numerous Rural Fire Departments.

The 1960 annual training school for the Southeastern States Forest Fire Compact

Commission, involving 10 Southeastern States, was held at Fayetteville in August of 1960 with attendance from all but two of the 10 States.

A Rural Fire Defense Plan is currently under preparation in cooperation with State Civil Defense and the U. S. Forest Service to provide for the coordinated use of the manpower and equipment resources of Federal land protection agencies and the State Forestry Division in case of enemy attack or natural disasters. The State Forester is Chairman of the Rural Fire Defense Committee and will operate under the over-all direction of the Director of State Civil Defense under such conditions.

County Cooperation

Work has been continued in financial cooperation with the 91 counties under forest fire control, such work being based on the County as a unit. This form of cooperation has met widespread support from the various counties. The Department cooperates with the various counties on the basis of their ability to pay as indicated by each county's taxable wealth. The counties pay from 25 to 40% of the total cost of fire protection within the county.

As of June 30, 1960, there were 9 counties representing about 1,169,000 forest acres in the State still without any organized form of forest fire protection, although one additional County initiated Cooperation with the Department as of

July 1, 1960.

Private Cooperation

Financial cooperation was continued with private forest owners who agree to pay an annual amount which is used to supplement other available funds to provide more intensified fire protection to their lands.

Detection System

The Forestry Division now operates 144 fire lookout towers and Federal land ownership agencies operates an additional 42 such towers in cooperation with the Forestry Division for reporting forest fires. The Division also operates 4 State-owned reconnaissance airplanes which supplement the tower network in periods of unfavorable visibility and these planes aid the ground crews by giving directions, fire progress and locations. Another valuable service is the parachuting of food, drinking water, coffee and small items of supplies to the crews.

Forestry Division Communications

Currently there are 145 fixed stations, 438 mobile and 67 portable two-way communications radios in operation by the Forestry Division along with a considerable milage of telephone line. Most of the fixed station radios are in lookout towers and District Offices and the mobile radios are on pick-up trucks, jeeps, larger trucks, station wagons and other fire suppression vehicles.

Permanent Improvements

New District Office buildings were constructed at Rocky Mount and Lenoir and new Towermen's residences were constructed at Edgecombe and Southern Pines' lookout towers. Tower cabins were constructed at Spruce Pine and Benns Knob

Towers, the latter being on the Cleveland-Burke county line.

The 8 towers purchased in the last Biennial period were erected and placed in operation. These eight towers, plus an additional one purchased and erected, and one moved to a better location and increased in height, materially improved the tower detection coverage for reporting fires. One additional steel lookout tower was purchased and will be erected in the next 2-year period. The initiation of cooperative forestry programs with additional counties will require at least 1 lookout tower per county.

Forest Fire Statistics

The forest fire statistics for the past four years are shown in the statistical chart. In evaluating these statistics, the following factors must be kept in mind:

- 1. Climatic conditions are all important in the actual suppression of forest fires.
- Funds available represented about one-half the amount needed for adequate protection.

Conclusion

The initiation of cooperative forestry programs in 4 additional counties during the Biennium represents steady progress toward the goal of State-wide forest fire protection. During the Biennium, major forest fires were controlled at considerably less acreage than in the previous Biennium reflecting the impact of more thorough organization, training and preparation for such fires. Cooperation from all State and Federal agencies, landowners and the general public are indicative of the real progress made in Forest Fire Prevention and Control.

FOREST FIRE STATISTICS FOR STATE PROTECTED AREAS BY CALENDAR YEARS

	1956	1957	1958	1959
Areo under Protection—Acre Number of Fires	15,651,852 3,007	16,810,200 2,273	16,810,200 2,467	17,209,600 3,047
1. Compers & Hunters	293 1,011 433 42 78 97 587 466	178 674 424 50 59 67 484 337	440 785 324 20 37 87 473 301	208 1,185 396 43 59 70 618 468
Totol	3,007	2,273	2,467	3,047
Areo Burned: Forest Land Open Lond	82,111 4,650	148,810 1,773	46,921 5,822	78,837 6,367
Totol	86,761	150,583	52,743	85,204
Domage: Forest Lond Other Totol	\$579,250 30,737 \$609,987	\$931,438 14,500 \$945,938	\$287,427 26,454 \$313,881	\$577,232 46,838 \$ 624,070
Low Enforcement: No. Fires Resulting in Low Enforcement Action	658	311	141	326
Finonces—Fiscol Years	1956-57	1957-58	1958-59	1959-60
Appropriation by Counties Appropriation by Private Owner Appropriation by State Rentals from Employees Appropriation, Federal Governmer Presuppression Fire Lines Bladen Lokes State Forest	rs 33,734 679,770 6,003 nent 349,955 3,971	780,863 6,402	\$ 333,927 33,145 825,114 6,400 310,500 4,700 8,844	\$ 341,698 31,998 987,916 8,548 311,600 4,700 8,844
Totol	\$1,345,294	\$1,471,221	\$1,522,630	\$1,695,304
Avoiloble Funds: Per Acre Protected	8.6 cent	s 8.75 cents	9.06 cents	9.85 cents

FOREST MANAGEMENT

North Carolina is one of the Nation's leading timber-producing states and for over 300 years the forests of the State have been a major source of income and employment for its citizens. Wood using industries are established in every county in the State and provide steady employment for the citizens of the Coastal Plain and Mountain Counties as well as those in the Industrial Piedmont. Investments in timber using plants are second only to the textile industry in the State's economy.

More than 45% of North Carolina's manufacturing establishments are wood

using industries.

Direct and indirect benefits are derived from the State's forests and include watershed protection, soil conservation, prevention of stream pollution, flood

damage, food and cover for wildlife, tourist attractions and many others. Hunters and anglers annually pay nearly one and one-half million dollars into government treasuries for the privilege of hunting and fishing in the lakes, streams and forests. The beauties of the forested slopes and valleys of the Smokey Mountain National

Park attract more tourists than any other National Park.

In relation to its forest area, North Carolina now provides more than its share of both timber growth and cut. With 4% of the Nation's commercial forest area, it supplies 5% of the annual cut and produces 6% of the annual growth. As the virgin timber stands of the western softwoods are cut out, the eastern states, especially North Carolina and the other southern states with their high growth capacity, will have to assume an increasing share of the cut.

Growing increased quantities of timber without regard to species, or quality, will not necessarily meet the timber needs of the Nation or North Carolina's forest industries. The State has enough forest land with productive capacity to easily meet prospective demands. The big problem is to grow more of the right kind,

and size of trees.

Yellow pine sawtimber, and pulpwood is by far the preferred source of raw material among the forest industries in and adjacent to North Carolina.

The use of hardwood pulpwood by the pulp and paper mills is increasing and there is a current shortage of high quality hardwood suitable for face veneer, for the quality hardwood furniture for which the State is famous, and for other

exacting uses.

Growth, at present, exceeds the cut for all important species groups and in all size classes. So much of the present inventory, however, consists of timber the forest industries cannot use that North Carolina faces the possibility that eventually the less desirable timber will occupy so much of the available forest land there will not be enough space left to grow the softwood and high quality hardwoods needed. There has been a marked increase in recent years in the amount of growing space taken over by undesirable or low quality hardwood and unmerchantable trees. It is estimated that cull trees of all species occupy about one-fifth of the available growing space.

Sixty-two per cent, or 19,341,000 acres, of the State's total land area is presently available for timber production. The National Forests, the State Forests, the land owned by the Pulp and Paper Companies and other wood using industries are, for the most part, already being managed for maximum timber production. Improvements in forest management practices are expected to continue on these

areas.

The 222,000 Farm Woodland owners with forest holdings averaging 60 acres are the key to future supplies of wood. These farmers own more than twice as much forest land as do all others together, and their woodlands, because of exploitation and neglect, are among the least productive. These lands offer the greatest need and opportunity for improving the timber supply.

It is to the owners of these potentially highly productive but presently understocked and unmanaged farm forests that the Division of Forestry offers professional forestry services. The outstanding feature of this activity is that the private land-owner is given in-the-woods advice and assistance on how best to manage and

market his timber.

When advice or assistance is requested, the forester makes a thorough reconnaissance of the farm forest to evaluate the present condition of the forest area and to determine the capability of the soil to produce specific forest products. The forester informs the landowner of these conditions and recommends a plan of action that will maintain or increase the forest growth, and at the same time meet the needs or limitations of the landowner.

Additional services include: Selecting, marking, and estimating the volumes in trees ready for harvest; assistance in finding markets for and selling forest products; elimination of cull trees, undesirable or unmerchantable species and restocking with desirable species; assistance in preparing open fields, cut over or otherwise understocked areas for natural regeneration or reforestation by planting; advice

and assistance in obtaining and planting forest tree seedlings.

Twelve Service Foresters are presently employed who devote all of their efforts ta giving forest management advice, tree marking service, and forest planting advice and assistance to landowners. Other foresters devote part of their time to this forest management advice and assistance to landowners.

During the last fiscal year nearly 18 millian board feet of sawtimber and over 9 thousand cords of pulpwood were selectively marked by foresters of the Division. In addition, private consulting foresters and industrial foresters marked some 2 million board feet of sawtimber and 4 thousand cords of pulpwood in accordance with the marking recommendations made by foresters of the Division. The demand for forest management and reforestation advice and assistance continues to increase.

A nominal charge is made for the marking service. Landowners are charged at the rate of 50ϕ per thousand board feet of sawtimber marked, 15ϕ per cord of pulpwood marked and 15ϕ per seed tree selected. No charge is made for the first 20,000 board

feet or 10 cords marked.

Gross returns to forest landowners receiving assistance from the Division in

marketing forest products from their land exceeded \$640,000.

Through cooperative agreements with the U. S. Forest Service, the Division hired two Watershed Foresters to provide the technical assistance and to supervise the forest management and reforestation phases of the Small Watershed Program (P. L. 566). One forester is presently assigned to the Deep Creek and Town Fork Creek Watersheds in Yadkin, Stokes and Forsyth counties, and the other to the Mud and Muddy Creek Watersheds in Henderson, McDowell and Burke Counties. Additional foresters will be hired as new watershed projects are approved and funds appropriated by Congress.

PROGRESS IN FOREST MANAGEMENT SERVICE TO LANDOWNERS

	Period 1948-1958	During Biennium 1958-1960	Total To Date
No. af Examinations Made	12,035	3,284	15,319
Total Woodland Acres Examined	1,948,323	190,912	2,139,235
No. of Tracts Marked	4,622	820	2,139,235 5,442
Acreage Marked	112,931	14,985	127,916
Baard Feet Marked	269.347,000	32.361,000	301,708,000
Cords Marked	110,774	16,850	127,624
Acres Given Planting Assistance	37.513	87,162	124,675
Applications Not Acted Upan		2,314	2,314

Over 2,300 requests from landowners had not been serviced at the close of the fiscal year. A large per cent of these were for the technical forestry services the Division agrees to provide the County Agriculture Conservation Program and the Conservation Reserve in Reforestation and Timber Stand Improvement. The effect of the Conservation Reserve and the forestry phases of the A. C. P. is reflected in the 87,162 acres for which planting advice and assistance was given. This is more than twice the number of acres of the preceding 10 years.

INDUSTRIAL FORESTRY

There has been a considerable reduction in the number of sawmills in the State over the past several years. This reduction in numbers has not reduced the lumber cut to any appreciable extent because the mills which are staying are the larger ones and almost without exception they have undergone extensive modernization and added automation which does make a much more efficient operation and a greatly increased production per man day. There are still some of the old type of "cut aut and get out" operations but they are for the most part gone. This type operator has either been replaced or educated in the modern methods and the operations are a permanent type installation drawing raw material from a comparatively small area.

Since they are in business to stay and at a given location, most of these operators are receptive to the idea of a selective or partial cut so that they can assure themselves a continuous supply of raw material through forest management and

wise use of available raw material.

Probably the best example of wise use of raw material is the debarking of logs so that the waste (slabs, etc.,) can be used for pulp chips. This is also another reasan for the stabilizing of the middle sized mills in the capacity of 12 to 25 thousand board feet daily production. This waste utilization equipment is expensive but most af the more moderately priced equipment is ideally suited for mill within this size range or possibly somewhat smaller. The primary reasons behind this size predominating are several but the two major ones are: 1- Raw material, 2- Cost

af equipment. A modern sawmill in the 15 to 25 MBF class with the waste utilization equipment can be built far about 25 to 30% af the cost of a mill of 35 to 50 MBF capacity. A mill of this smaller class can be supplied with raw material fram a comparatively small area compared to the larger ones with resulting

savings in transpartation costs for raw material.

This modern, automatic machinery does an excellent job of manufacturing a high quality, regular, and accurately sized product if it is in adjustment and properly aligned but it does not lend itself to often and repeated maves. It must have a good foundation and available power to operate properly. The small mills which formerly cut most of the lumber sawn could be moved easily and aften but the standards of manufacture were low and much waste developed from miscut lumber. The present day market will not stand this waste either in the lumber or the inability to utilize the normal waste from a milling aperation.

lumber. The present day market will not stand this waste either in the lumber or the inability to utilize the normal waste fram a milling aperation.

The industrial forestry program is aimed at assistance to aperators in bringing their mills up to acceptable standards, location of suitable types of waste utilization, equipment for the particular needs of the individual aperation, marketing assistance to some extent, and the publication of a listing so that landowners with available timber will have the opportunity of offering it to mare buyers which will give the landowners a better price and in effect make timber available to more operators. Educational work is going on continuously far wider acceptance of farest management on the part of the operators which will increase the timber supply and generally improve the economic situation of everyane in North Carolina. On the other side, educational work is also being done to acquaint foresters and timber owners with some of the problems of the aperators. These two programs will in time allow a more businesslike arrangement between buyer and seller thereby everyone will profit and not one at the expense of the other. One of the major projects along this line is the exploratory work which is now going on concerning the adjustment of the International lag rule to take care of some southern pine sawing practices which were not considered when the rule was originally devised. When these adjustments have been made, we hape that they will lead to widespread acceptance of this rule and detract from the popularity of the grossly unfair Doyle rules.

The increase in the use of waste to make pulp chips are borne out by the

following figures and years.

 1954—
 126,000 Cords for entire South

 1955—
 374,000 Cords for entire South

 1956—
 80,127 Cords for North Carolina

 1957—
 102,783 Cords for North Carolina

 1958—
 190,107 Cords for North Carolina

 1959—
 311,700 Cords for North Carolina

The 311.7 thousand cards of chips from North Carolina waad wasts represents 779,250 tans, this is between 35% and 40% of the total solid waad mill waste in the State. The value of rough lumber (before any finishing ar remanufacture) manufactured in North Carolina, based on an estimated cut af 1,900,000,000 baard feet annually and valued at appraximately \$60 per 1000 board feet, is \$114,000,000. The additional returns to mills in North Carolina, in 1959, from the sale of waad waste as pulp chips amaunted to about 4.5% of their returns from the primary product or over \$5,000,000. This return is less than ane-half af the potential if 100% could be utilized since the value af the waste waad is mare than 10% on the average and in some cases as high as 15 to 20% af the value of the rough lumber cut.

The sum total of this type of progress tends to help stabilize the aperations and therefore the economy of the area in addition to much more camplete utilization of waste takes same of the strain off the forests, since this wood must come from some source, therefore, a better management job can be done with

production of the best and highest value products from the stands.

NURSERIES

The North Carolina Division of Forestry now operates four farest tree nurseries. These installations are located in Johnston, Wayne, Buke and Henderson counties. They have a combined capacity of approximately 100 million seedlings annually.

Tree seedlings are sold at approximate cost of production for windbreaks, erosion control and reforestation at varying prices, with \$4.50 per thousand f.o.b.

nursery for several species of pines.

The following tabulation shows the distribution breakdown by species and cooperators. The considerable increases in the last tree planting seasons tabulated were due to the Soil Bank program which encouraged farmers to retire crop land by planting trees. Much of the forest tree planting in the future will be the conversion of low grade stands to more valuable species.

DISTRIBUTION OF FOREST TREE SEEDLINGS BY SPECIES

Species	1956-57	1957-58	1958-59	1959-60
Atlantic White Cedar	-0-	-0-	348,000	15,575
Balsam Fir	-0-	-0-	282,500	424,375
Black Locust	20,000	3,900	-0-	-0-
Black Walnut	3,600	-0-	-0-	-0-
Cypress	-0-	-0-	1,950,487	191,150
Lóblolly Pine	36,635,449	63,894,948	72,891,971	47,649,935
Longleaf Pine	708,700	1,228,400	1,720,935	1,084,486
Maritime Pine	-0-	-0-	-0-	-0-
Norway Spruce	-0-	-0-	42,500	13,000
Pond Pine	-0-	-0-	285,500	56,100
Red Cedar	320,100	1,297,375	350,891	484,850
Shortleaf Pine	793,910	881,000	1,090,150	593,200
Slash Pine	14,436,272	7,450,500	10,988,000	24,087,250
Virginia Pine	-0-	-0-	86,400	90,900
White Pine	2,391,825	5,464,060	6,881,422	7,777,600
Yellow Poplar	259,400	107,950	1,071,750	581,000
Miscellaneous	1,901,355	3,432,450	7,050	7,600
Totals	57,470,611	83,760,583	97,997,556	83,057,921

DISTRIBUTION OF FOREST TREE SEEDLINGS BY CLASS OF COOPERATORS

	No. of Cooperators	No. of Trees	No. of Cooperators	No. of Trees
Class of Cooperators	Biennium 1958-1960		Cumulative Grand Total	
Farmers Industries Schools State Club & Organizations Municipalities Federal Agencies Others	. 115 . 73 . 18 . 107 . 25	135,108,450 37,781,000 263,650 1,207,500 293,200 2,420,050 3,066,350 914,800	49,602 646 779 231 2,815 118 123 943	276,338,854 155,149,649 3,021,109 6,373,286 1,595,114 10,650,124 15,913,117 10,295,177
Totals	. 13,400	181,055,000	55,257	479,336,430

PUBLICATIONS

The ninth edition of "Common Forest Trees of North Carolina" was reprinted in 1959. To date 75,000 copies of this publication have been distributed to school teachers and pupils. One copy is given free to the teachers and pupils and others are charged 15¢ per copy.

The Division of Forestry in cooperation with the Tennessee Valley Authority published a booklet entitled "Sawmills and Lumber Production For Twenty-Six Counties in Western North Carolina". This publication contains the results of a comprehensive survey of sawmill activity in lumber production in 26 counties in western North Carolina for the calendar year 1958.

A brochure on the Bladen Lakes State Forest is available to show progress and developments on this area. In cooperation with the Tennessee Valley Authority a "Guide For Watershed Management - The Second Decade" was published for the

Town of Waynesville and others interested.

A pamphlet designed to assist forest landawners in marketing various products entitled "Buyers of Forest Products in North Carolina" is available with distribution limited to specific requests.

BLADEN LAKES STATE FOREST

The primary objective of this 35,000 acre State Forest is to build up a grawing stock of timber on the previously over-cut and badly burned area; to utilize all resources including game; to demonstrate that such an area can more than pay its own way under sound forestry operations.

The area comprising the State Forest was originally leased from the Federal Government in 1939. In October 1954, the area was deeded to the State with the

exception of certain mineral rights.

A variety of activities are carried on, as nated from the table of receipts acquired during this biennium. The area has been self-supporting since its management by the Division of Forestry. The Forest now pays taxes to Bladen county. These taxes are based on a total valuation of the forested land at \$1,301,570. Taxable value is 35% of this valuation, and the taxes amounted to \$7,142.48 in 1959.

RECEIPTS

BLADEN LAKES STATE FOREST

Fired Voers 1958-50 and 1959-60

	Fiscal Tears 1936-39 and 1939-00	
3,711,142 585,593	Board Feet Rough Green Lumber	\$ 247,543.01 13,965.37
6.239.75	Cards Pulpwaad	70,241.20
144.65		160.27
	Paunds Charcoal	410.50
43,724	Treated Pine Pasts	23,088.45
19,000	Tabacca Sticks	91.90
	Slabs	3,205.69
	Handle Squares etc.	1,541.84
	Custam Treating	1,027.86
	Pine Straw	428.00
	Lightwood	11.50 189.17
	Christmas Trees	4.023.75
	Rentals & Sale af Equipment(1959-60)	,
	Deer Hunts	450.00
	Miscellaneous	912.99
	Tatal	\$ 367,291.50

BELOW ARE OUTLINED THE YEARLY GROSS RECEIPTS SINCE THE YEAR 1939

1939-40 \$ 169.24 1940-41 1,092.57 1941-42 8,786.37 1942-43 16,761.72 1943-44 31,794.00 1944-45 41,848.13 1945-46 26,793.95 1947-48 31,045.46 1948-49 52,597.53 1949-50 61,189.83 1950-51 93,013.21 1951-52 95,008.23 1952-53 85,735.81 1953-54 85,592.77 1954-55 95,388.02 1955-56 103,415.33 1957-58 106,850.65 1957-58 123,529.40 1958-59 173,024.78 1959-60 194.266.72	Year		Amount
1958-59	1939-40 1940-41 1941-42 1942-43 1943-44 1944-45 1945-46 1946-47 1947-50-51 1951-52 1952-53 1953-54 1954-55 1955-56		169.24 1,092.57 8,786.37 16,761.72 31,794.00 41,848.13 26,793.95 31,045.46 52,597.53 61,189.83 93,013.21 95,008.23 85,735.81 85,592.77 95,388.02 103,415.33

Tatal \$1,459,942.28

FOREST INSECT & DISEASE CONTROL

The forest pest situation has been highlighted during the biennium by the oak wilt disease, the white pine blister rust disease and the balsam wooly aphid. Cooperative pest control projects, under the Federal Forest Pest Act, have been continued in combating the oak wilt and white pine blister rust disease. Also, a project has been set up and control work has been started to protect some of the high-value fir stands in Mt. Mitchell State Park from being killed by the balsam wooly aphid.

OAK WILT

This disease is still confined to a five-county area (Buncombe, Haywood, Madison, Swain and Jackson) in western North Carolina. When using the number of new infections found each year (per 100 square miles) as a basis for evaluating the status of this disease, it appears that control against oak wilt is holding this disease in check. This is not the case in eastern Tennessee where no control is being applied.

Year New	v Infections		New Infections Per 100 Sq. Mi.
1954 (Control Began)	9	1900	1.1
1958	12		1.5
1959	4		.5
1960 (Control work still in progress but trend indicate	s that result	s will be	favorable.)

WHITE PINE BLISTER RUST

All white pine plantations being established in blister rust areas are being checked to determine the hazard for each individual plantation. Where the hazard is very severe and control costs unreasonable, the landowner is advised to change planting sites or make other adjustments. When control is practical, the necessary work is carried out.

In natural white pine stands, surveys are being carried out to keep up with this disease. Also, control work is being done in some instances as a follow-up to the work that was done through the public work programs during the 1930's.

BALSAM WOOLY APHID

The control project against this insect was underway at the end of the biennium. Approximately 100 acres of the fir type on Mt. Mitchell was being sprayed. Procedures and specifications developed in a pilot test in 1959 are being followed in the spraying.

OTHER PESTS

Other serious pest outbreaks have occurred in several areas of the State. The elm spanworm is defoligating hardwood trees in Cherokee and Clay counties. The Virginia pine sawfly has continued active in the northcentral counties. The southern pine beetle is present in epidemic proportions in Dare and Tyrrell counties. Even though those and some other pests are causing serious damage, both economic and/or technical limitations do not allow all-out direct control at this time.

MINERAL RESOURCES

The Division of Mineral Resources, which corresponds to the geological survey of many states, is the official representative of the Department of Conservation and Development in the fields of geology, mineral resources, mining, and treatment of minerals. As designated by State law, "It shall make such examination, survey ond mapping of the geology, mineralogy and topography of the State, including their industrial and economic utilization, as it may consider necessary." Its objective is to improve the general welfare of North Carolina through a better understanding and a wiser use of its geology, topography and mineral resources. The programs of work and the services of the Divisian may be summarized as

- 1. The Division, through its own personnel and in cooperation with the United States Geological Survey and other agencies, carries out systematic surveys on the geology and mineral resources of specific areas which may be treated as units. Such work includes detoiled topographic and geologic mappings, systematic sampling, petrographic study, and a general appraisal of the geology and mineral resources of each area surveyed.
- 2. The Division carries out, in cooperation with various state and federal agencies and industrial concerns, a wide range of mineral investigations restricted to the study of a specific mineral or mineral resource. Individual deposits and prospects are studied, mapped and sampled. Mineralogical and petrographic studies are corried out and a general appraisal is made of each depasit and the resaurce as a whole.
- 3. The Division cooperates with landowners, prospectors, small miners and citizens of the State by identifying and reporting on specimens of rocks and minerals sent in for identification. Also, upon requests, mineral deposits are examined and information furnished as to their value and uses when it appears that the furnishing of such information will advance the general welfare of the State.
- 4. The office of the Division of Mineral Resources serves as a clearing house for this information through the publication of bulletins, economic papers, information circulars, and reports of investigation. These publications which have considerable educational value are sold at nominal prices intended to cover the casts of printing.

GENERAL

Due to the business recession during the biennium 1956-1958, the mineral production of North Carolina in 1957 was the lowest since 1954. Marked improvements began about the middle of 1958 and by the end of that year production was back to normal. As a result, the biennium 1958-1960 was one of the best in the history of the State. The mineral production of 1959 appraximated the all-

time high of 1954 and 1960 promises to set a new record.

The principal minerals produced in the State in 1959 in the order of value were (1) stone, (2) sand and gravel, (3) mica, (4) feldspar, (5) talc and pyraphyllite, (6) copper, (7) spodument (lithium), and (8) cloys. The value of stone increased in 1958 and again in 1959. The value of sand and gravel increased approximately 21 percent in 1959 over 1958. The value of mica increased slightly in 1958 as compared with 1957 but was up 7 percent in 1959 over 1958. Crude feldspar decreased in value in 1958 as compared with 1957 but was up 7 percent in 1959 over 1958. Crude feldspar decreased in value in 1958 as compared with 1957 but was up 16 percent in 1959 over 1958. The value of talc and pyrophyllite sold in 1958 was lower than in 1957 but increased 8 percent in 1959 over 1958. The value of copper increased 10 percent in 1958 over 1957 and 33 percent in 1959 over 1958. Collection of production figures on spodumene (lithium) in 1958, for the first time since 1953, showed North Carolina to be the principal domestic producer of lithium ores. However, perduction declined in 1959 due to the cancellation of contract for lithium principal. contracts for lithium miner the Atomic Energy Commission. Production figures, while collected, are classiand are not included in the State total. If these figures could be included, the coard would show an all-time high in the value of

the mineral production of North Carolina for the years 1958 and 1959. The value of clays and shales used in the manufacture of brick and tile and lightweight aggregate declined 16 percent in value in 1958 as compared with 1957 but increased 23 percent in 1959 over 1958.

Figure 1, shows graphically the value of the mineral production in North Carolina during the decade 1950-1959 as compared with that of the decade

1940-1949.

DEVELOPMENTS IN THE MINERAL INDUSTRY

A number of important developments took place in the mineral industry of North Carolina during the biennium 1958-1960. Appalachian Sulphides, Inc., enlarged its mill at the newly developed Ore Knob Copper mine in Ashe County to a capacity of 800 tons of ore per day and began full-scale production in 1958. This enlarged mine and mill capacity, and the rise in the price of copper, account for the increased value of the copper production in North Carolina. By-product gold and silver in the amount of approximately \$60,000 per year are being recovered from this mine.

Examination and exploration for copper and other minerals were carried out by mining interests at a number of old mines and prospects in the Piedmont and Mountain areas of the State. Geochemical methods were widely used. According to Mining World (April 1960) the deepest exploratory hole, approximately 1400 feet

deep, was drilled near the old Phoenix mine in Cabarrus County.

Tungsten Mining Corporation, which closed its mine and mill in Vance County on June 28, 1958, became a Division of Howe-Sound Company in 1959. The mine and mill of Tungsten Mining Corporation in Vance County were reactivated as of April 1, 1960 with approximately 200 employees. In 1959, Cranberry Magnetite Corporation obtained a long term lease on the Old Cranberry Magnetite mine in Avey County and began plans to open the mine and construct a concentrating plant and reduction furnace to process the ore. A small amount of ore was produced from the mine during 1959. This was the first commercial production of iron ore in North Carolina since 1936. Tennessee Copper Company, after a drilling program that indicated the presence of mineable reserves of lead and zinc ore, took over the old Silver Hill mine in Davidson County, in 1959, and began development work. The old shaft has been reconditioned and deepened several hundred feet and plans made for a mill to concentrate the ore. This was probably the mining highlight in the southeast for the year 1959. Due to the failure of the metal titanium to prove suitable for use in industry as had been expected, interest in the ilmenite sands (titanium ore) of Eastern North Carolina, declined and two leases that had been granted by the Department of Conservation and Development to explore for ilmenite in the sounds of the State were allowed to expire by the holders after limited investigations. After extensive exploratory work at the Star mine in Montgomery County, Union Refining and Mining Company of High Point, in 1959, began developing a mine and constructing a modern refinery to mine and process gold ore. Work was progressing satisfactorily at the end of the biennium.

Major developments took place in the lithium industry of the State during the year 1959. Texas Gulf Sulphur Company took a five year option on the holdings of Basic Atomics, Inc., near Lincolnton and planned exploratory work and pilot plant studies. Foote Mineral Company carried out extensive drilling on its Kings Mountain property that proved its spodumene (lithium ore) reserves to be 30 percent higher than previous estimates. Lithium Corporation of America moved its laboratory and producing facilities from Minnesota to Bessemer City where it has had a large plant in operation for several years for the processing of foreign uses. The firm also announced that it would reopen its North Carolina mines

in 1960.

There was renewed interest in olivine and the State College Mineral Research Laboratory in Asheville carried out beneficiation studies. Construction of a mill to

process olivine from the Wray mine in Yancey County was started.

The oil, gas and sulphur mining lease granted to J. E. Fitz-Patrick of Fort Worth, Texas, in 1957, was transferred to Coastal Plains Oil Company in 1958. In the spring of 1959, Coastal Plains Oil Company drilled 7 wells around Lake Mattamuskeet in Hyde County that varied in depth from 1635 to 2005 feet and contained a total footage of 13,345 feet. No oil, gas or sulphur were found but plans are being made to do further drilling. Bryant P. Seay of Houston, Texas, drilled two wells in the Hoffman Forest of Jones and Onslow Counties, both of which were dry. Both wells bottomed in basement rock, one at a depth of 1430 feet and the other at a depth of 1335 feet. In September 1959, American Mining and Development Company of New York City drilled one well in Bladen County and one well in Pender County for oil and salt. Neither oil nor salt was found. Both wells bottomed in basement rocks at depth of 700 feet. In June 1960, Peter Henderson Oil Company of New York City drilled three wells in the Hoffman Forest of Jones and Onslow Counties, all of which were dry. Plans have been announced

The production of clays and shales used in the manufacture of brick, sewer pipe, tile and lightweight aggregate, and these products, showed a healthy growth during the biennium 1958-1960. Triangle Brick Company announced a new plant near the Research Triangle in Wake County. Borden Brick and Tile Company completely renovated its plant in Durham. Southern Lightweight Aggregate Corporations enlarged its plant at Aquadale in Stanly County and opened a new clay pit near Leaksville in Rockingham County to supply a nearby plant in Virginia. Tuff-Lite Corporation, remodeled its plant at Salisbury and constructed a new plant near Gold Hill. In 1958, the last year for which figures are available, North Carolina produced one of each three brick manufactured in the Southeastern States and one of each eleven brick manufactured in the United States. In that year it was fourth in the nation with Ohio first, Pennsylvania second, and Texas third.

Consolidations and mergers were the highlight of the stone industry in 1959. Superior Stone Company acquired Bryan Rock and Sand Company and in turn became a division of American Marietta Company. Vulcan Materials Company, purchased the Piedmont Quarry Company, Pioneer Quarry Company, Greystone Granite Quarries, and W. E. Graham and Sons, all of which will operate as the W. E. Graham and Sons Division. Approximately 33 quarries and pits were involved in the transactions. There was continued interest in limestone for cement manufacture and exploration work was carried out by two companies in the Piedmont region and one or two companies in the Coastal Plain. Volunteer Portland Cement Company continued exploration of limestone deposits near Maple Hill, Pender County, until the fall of 1959 when it was taken over by Ideal Cement Company. Early in 1960, Ideal Cement Company announced plans to build a modern portland cement plant at Wilmington.

North Carolina continued to be the leading State in the production of feldspar and mica. The new feldspar plant of Lawson United Feldspar and Mining Company which ws completed at Penland, Mitchell County, near the end of the 1956-1958 biennium was placed in operation, and the Spruce Pine Mica Depot of the General Services Administration of the Federal Government continued to purchase strategic quality mica. Carolina Pyrophyllite Company began mining pyrophyllite on Bowling's Mountain in Granville County and trucking it to a mill

at Staley in Randolph County.

WORK OF DIVISION

In keeping with a grogram of Mineral studies recommended by the Mineral Resources Committee and approved by the Board of Conservation and Development at the April 1958 meeting, the systematic work of the Division of Mineral Resources is divided into two major categories: (1) commodity studies and (2) geologic studies. Commodity studies cover specific minerals or mineral deposits such as asbestos, clays and shales, ilmenite, limestones, etc. Geologic studies include detailed geologic mapping and examination of mineral deposits in a specific area.

In the category of commodity studies, four programs were started as follows: (1) limestone studies, (2) ilmenite studies, (3) a geophysical survey of the Deep River Coal Field and (4) asbestos studies. In June 1958, a study of the limestones of the Piedmont and Mountain areas of the State was started in response to the many requests for information on the quantity and quality of limestone in those areas. In the course of the study, a re-examination was made of all the deposits previously known and described in reports now out of print. In addition, deposits of some importance not previously known were located and studied. The deposits were evaluated as to the amount and

availability of rock present and representative samples were collected and analyzed to show the quality of the rock. This information was assembled in a formal report and published in the spring of 1960 as Bulletin 74, "Crystalline Limestones of the Piedmont and Mountain Regions of North Carolina". In June 1958 in response to the many requests being received and at the direction of the Division of Mineral Resources of the Board of Conservation and Development, a study of the ilmenite deposits in the sounds and estuaries of the Coastal Plain was started. This is a longrange program that will require three or four years to complete. Considerable progress was made on the project in the fall of 1958, but with the decline in the interest in titanium, which is obtained chiefly from ilmenite, work on the project was suspended in a favor of more important programs. One of the most important undeveloped mineral resources of North Carolina is the Deep River Coal Field of Chatham, Lee and Moore Counties, which according to Professional Paper 246 of the United States Geological Survey contains more than 100-million tons of coal. A major difficulty in mining this coal is a number of minor faults which interrupt the beds. In July 1959, a geophysical survey of this field, by the use of electro-resistivity equipment, was undertaken. The United States Geological Survey cooperated informally on the project by furnishing the equipment and advising on the work. During the course of two weeks work, it was found that the differences in resistivity of the fault planes and that of the surrounding rocks was not great enough to measure and the project was abandoned. It appears that this difficulty was caused by traces of salt in the formations. A study of the asbestos deposits of the western part of the State was started in the spring of 1959. North Carolina has been a small but steady producer of anthophyllite asbestos for years. While less valuable than chrysotile asbestos, anthophyllite asbestos has a number of important uses and many requests have been received for information on the North Carolina deposits. Most of the deposits are small but they are more numerous than had been expected and indications are that the reserves of asbestos in the State are considerable. Satisfactory progress had been made by the end of June and the field work should be completed by the end of 1960.

In the category of geologic studies, three projects were undertaken as follows: (1) geologic mapping of the Albemarle quadrangle in Stanly County, (2) geologic mapping of parts of Davidson County and (3) geologic mapping of Moore County. The geologic mapping of the Albemarle 15-minute quadrangle has been completed and a geologic map and report on the quadrangle are about ready for publication. The Albemarle quadrangle is an important area from the standpoint of geology and mineral deposits and the report will present valuable information on both. Geologic mapping was continued on a cooperative basis with the United States Geological Survey in Davidson County. Work was first started in the Lexington and Hargrove 71/2-minute quadrangles but has been expanded to include the Denton 15-minute quadrangle. Work in the Denton 15-minute quadrangle is progressing satisfactorily and should be completed in 1961. The Denton 15-minute quadrangle joins the Albemarle 15-minute quadrangle on the north and work in the two quadrangles is being closely coordinated. The objectives of the work in both quadrangles are to map the geology of the area and determine the structural, lithological, mineralogical, geochemical and age relations of the rocks and the bearing these factors have on the mineral resources of the area. Geologic mapping of Moore County was started in the fall of 1959 and the field work was about 75 percent completed at the end of June 1960. Moore County, which is considered one of the best balanced counties in the State, economically, contains rocks of both the Piedmont and Coastal Plain types as well as important mineral resources. When completed, the report on Moore County should make an important contribution to that part of the State. Geologic mapping carried out in cooperation with the United States Geological Survey prior to the 1958-1960 biennium include the Spruce Pine district of Avery, Mitchell and Yancey Counties and the Hamme Tungsten District of Vance County. A report, "Geology of the Spruce Pine District, Avery, Mitchell and Yancey Counties," was approved in January 1960 for publication as a U.S. Geological Survey Bulletin. A report, "The Geologic Setting of the Hamme, Tungsten District, North Carolina," was completed and submitted for publication as a U. S. Geological Survey Bulletin. Copies of both of these reports are on file in the office of the Division of Mineral Resources.

Formal cooperation with the United States Geological Survey on geologic mapping and mineral studies in North Carolina which was started several years ago on a

small scale is beginning to pay dividends. In a letter dated March 22, 1960, the Chief Geologist of the United States Gealogical Survey listed 10 major non-cooperative projects being carried out on the geology and mineral resources of North Carolina by the Geologic Division of the U. S. Geological Survey. Four of these projects are of special interest. They are: (1) Western North Carolina Pegmatites, Avery, Mitchell and Yancey Counties. This is a special study to collect data on distribution, quality and type of mica in shoots of different pegmatite zones; relation of type of mica to composition of pegmatite minerals and wall rocks; and distribution of mica pegmatites with respect to regional structure, (2) Massive Sulfides of the Southeastern States. This includes detailed reconnaissance mapping in the Boone-Jefferson area which is underway, (3) Central Piedmont which consists of detailed geologic mapping in several quadrangles near Concord in Cabarrus and Mecklenburg Counties and (4) Grandfather Mountain area which includes geologic mapping of several quadrangles in the area. Mapping has been completed in the Linville and Table Rock quadrangles and is underway in the Lenoir and Blowing Rock quadrangles.

GROUND WATER STUDIES

Ground-water studies were conducted in cooperation with the United States Geological Survey through June 30, 1959. The 1959 session of the General Assembly of North Carolina established a Department of Water Resources which took over all work on groundwater as of July 1, 1959. The following projects were campleted as of June 30, 1959: (1) a report, "Geology and Ground-Water of the Greenville Area," was completed and published as Bulletin 73; (2) field work and a report on the geology and ground-water resources of the Wilmington-New Bern area; (3) field work and a report on the geology and ground-water resources of the Fayetteville area; (4) field work and a report on the geology and ground-water resources of the Clinton-Goldsboro area, and (5) field work and a report on a water supply for the Dare Beaches sanitary district on the Outer Banks of Dare County.

COOPERATIVE SERVICES

In addition to the work outlined above, the Division of Mineral Resources serves as a clearing house for information on the geology and mineral resources of North Carolina. During the first half of the biennium a number of well sites were located for towns, schools, state institutions and industries. The Division cooperated with landowners, prospectors, small miners, and people interested in the geology and mineral resources of the State by rendering services not otherwise available. Information and assistance were furnished on asbestos, clays, mica, prophyllite, spodumene, stone, sand and gravel, oil and gas possibilities of the State, radioactive and other minerals. A number of talks were made to civic and mineral clubs, and schools on the geology and mineral resources of North Carolina. The Divisian caoperated with the Southeastern Section of the Geological Society of America which met in Chapel Hill on April 16-18, 1959 and with the Carolina Geological Society which met at Albemarle on October 24-25, 1959, by preparing guidebooks for field trips. This was considered a valuable service as a number of outstanding geologists from several states attended these meetings. Approximately 1500 rock and mineral specimens were examined for citizens of the State and information furnished as to their identity and value. This type of work is considered important and prospectors and collectors are encouraged to send in specimens for examination. Through the examination of such specimens some of our most important mineral deposits have come into production. The Division serves as a clearing house for the distribution of technical reports on the geology and mineral resources of the State. During the biennium, more copies of maps, bulletins, economic papers and information circulars were sold than during any like period in the history of the Department.

The following publications were issued during the biennium:
Bulletin No. 73, "Geology and Ground-Water Resources of the Greenville Area,
North Carolina," by Philip M. Brown.
Bulletin No. 74, "Crystalline Limestones of the Piedmont and Mountain Regions
of North Carolina," by Stephen G. Conrad.

STATE PARKS

FOR THE PERIOD JULY 1, 1958 - JUNE 30, 1960.

PURPOSES OF STATE PARKS

The Division of State Parks has but one purpose: TO SERVE THE PEOPLE OF NORTH CAROLINA AND THEIR VISITORS BY:

1. Preserving and protecting natural areas of unique or exceptional scenic value not only for the inspiration and benefit of the present generation, but, also, for generations to come. This is the most basic function of state parks and must always be given first priorty.

2. Establishing and operating state parks that provide recreational use of natural

resources and outdoor recreation in natural surroundings.

3. Portraying and interpreting plant and animal life, geology, and all other natural features and processes included in the various state parks.

4. Preserving, protecting and portraying scientific sites of statewide importance.

THE GOAL

The ultimate goal toward which the Department of Conservation and Development, through its Division of State Parks, is working is the establishment, development and operation of a system of state parks which will preserve and protect permanently the most important scenic and scientific sites in the state; provide for the people of North Carolina adequate opportunities for outdoor recreation in natural surroundings; and portray and explain the natural and scientific features of the state parks.

In these times, an enormous amount of interest is being focused on outdoor recreation. No other phase of natural resource use is receiving more attention than the recreational use of natural resources. Many agencies - public and private, nationwide and local - are devoting a great deal of study and thought to what has been called "The Crisis in Outdoor Recreation". No matter who makes it, each study reveals the same basic fact: there are not now nearly enough outdoor recreation areas to meet current demand and the shortage will become increasingly acute unless the acreage devoted to state parks and other outdoor recreation areas is greatly increased.

What causes this overwhelming demand for outdoor recreation resources? Four

things: More people. More income. More leisure. More mobility.

All of these factors are at work in North Carolina. Our population has increased and will continue to increase. Our per capita income has increased and will continue to increase. Our leisure time has increased and will increase further. Our mobility, the ability to travel, has increased and will continue to increase, thanks to the automobile and our modern highways:

It will take much more state park acreage than now exists to meet the demands for outdoor recreation created by more people, more income, more leisure and more

mobility.

Many authorities in the field of outdoor recreation resources conclude that to meet present demands, each state should have three acres of state parks per 100 persons of state population, and that within 30 years, more or less, eight acres of state parks will be required per 100 persons.

North Carolina's state park acreage falls far short of these standards! Three acres per 100 persons to meet present demands means 150,000 state park acres. We now have **less than one quorter** of this state park acreage. Eight acres per 100 persons to meet future demands means from 450,000 to 600,000 state park acres, depending on the amount the state's population increases. The State pork program has a long way to go just to catch up with current demand and o great deal further to go to meet future demonds.

REPORT OF PROGRESS

The opportunities the North Carolina State Parks give our citizens for enrichment of their personal lives, for enjoyment of outstanding natural scenery, for wholesome recreation and for pyhsical, mental and spiritual renewal and refreshment make the state park system a very important factor in the State's efforts to help its citizens achieve fuller, richer and more meaningful standards of living. During the past two

years, state park activities have been concentrated on improving the quality of and

expanding these opportunities.

The work the Division of State Parks does to carry out its purposes and functions, and to achieve its goal is complex and varied. To assure its accomplishment in an orderly, efficient and economical manner, this work is organized into nine major divisions as follows:

- 1. Operation for Public Use
- 2. Maintenance
- 3. Interpretive and Public Use Progarms
- 4. Protection and Law Enforcement
- 5. Business Management
- 6. Information and Education
- 7. Personnel Administration
- 8. Planning, Development and Construction
- 9. Cooperation with and Services to Other Agencies

There has been steady progress in each of these divisions of work during this biennium and many accomplishments in each. A summary of progress and accomplishment follows:

1. OPERATION FOR PUBLIC USE

The most vivid proof of the public's need and demand for state parks is the

volume of pulic use.

Public use of the North Carolina State Parks continued to increase. State park attendance during this biennium reached an all time high of 3,096,184 - this despite numerous wet weather weekends during the summer of 1958. It exceeded attendance for the biennium ending June 30,1958 by 2.6 percent; attendance for the biennium ending June 30, 1956 by 1.8 percent; attendance for the biennium ending June 30,1954 by 14.5 percent; attendance for the biennium ending June 30, 1952 by 26.9 percent; and attendance for the biennium ending June 30, 1950 by 88.8 percent. In ten years, state park attendance has almost doubled.

Even more startling, and actually far more important, are these increase in

active use of the state parks:

Public Use During Biennium Ending June 30, 1960	Percentage of Increase Over Biennium Ending June 30, 1958	Percentage of Increase Over Biennium Ending June 30, 1950
Total Attendance—3,096,184	2.6	88.8
Camper Days — 74,699	45.3	820.0
Picnickers — 879,640	3.4	225.0
Swimmers — 395,627	26.8	383.0

These figures graphically illustrate the fact that each year more and more of those who come to the state parks are park **users** instead of merely park **visitors** and that each year the state parks mean more and more to those who use them. These figures also make it obvious that to meet the mushrooming demand for state park services that State must finance the acquisition, development, operation and maintenance of many more state parks than it now has.

2. MAINTENANCE

Careful maintenance to protect the public's investment in the state park system is a very important part of state park work. Maintenance is a continuous problem. Day in and day out, maintenance work must be done to keep the state parks and the facilities in them in good condition and to protect the health and safety of state park users.

The maintenance program for each state park is carefully planned in advance to make sure proper priority is given to maintenance projects and to get the most work possible accomplished with available funds and personnel. All maintenance programs are so planned that most major maintenance jobs are done during the late fall, winter

and early spring months. This accomplishes two purposes: it permits park personnel to cancentrate on aperation for public use during the summer months heavy use season and it makes maximum utilization of the time and efforts of field personnel.

During this biennium, a wide variety of maintenance projects ranging from minor repairs ta major renovations were completed. The completion of these projects further reduced the backlog of maintenance work and brought the entire state park system closer ta being in a first-class state of maintenance. However, many of the structures and utilities in the state park system were built twenty to twenty-five years ago and will require major repairs and renovations to put and keep them in good condition. Funds for doing sa have been requested in the budgets for the 1961-63 biennium.

3. INTERPRETIVE AND PUBLIC USE PROGRAMS

Special emphasis continued to be placed on helping park users gain better knowledge and understanding of the **natural** features of each state park so that they can better enjay and make fuller recreational use of the state parks. Nature study and similar interpretive programs are the main means of doing this and each year persannel of the Division strive to make these programs more interesting and meaningful to the park user. The wark of the Chief Park Naturalist in assisting the park superintendents in selecting, training and coordinating the activities of seasonal naturalists, the preparation of exhibits for park museums, guided walks, campfire and other pragrams, and establishment of marked nature trails are among the things done to make the interpretive programs more interesting and meaningful. Enjoyment and recreational use of natural features are the most inspiring and lasting benefits state parks offer, and interpretive programs are among the truly distinctive services rendered by state parks.

During this biennium, summer naturalists were employed at six state parks (Cliffs of the Neuse, Hanging Rock, Morrow Mountain, Mount Mitchell, Reedy Creek, and William B. Umstead) and these men carried out planned interpretive programs continuously during the summer months. At two state parks, Morrow Mountain and William B. Umstead, these programs were extended to the spring and fall months

on weekends.

The park superintendents and park rangers aided many groups large and small, ta plan and enjoy their use of the state parks, and assisted other groups with special programs. As in past years, swimming and lifesaving classes were taught at several state parks in cooperation with the American Red Cross.

4. PROTECTION AND LAW ENFORCEMENT

State Parks

Although done without fanfare, and very much taken for granted, protection and law enforcement is a vital part of the state park program. It is the three-part job of protecting the state parks from fire, vandalism, trespass and some of the assaults of nature; protecting the wildlife in the state parks from hunting, trapping and other forms of molestatian (all state parks are wildlife sanctuaries); and preserving law and order in the state parks. Neglect or relaxation of protection and law enforcement activities could easily result in severe damage to the state parks and drastic change in the clean, wholesame environment they provide for family recreation.

Continual vigilance, alert patrol and constant attention to fire prevention measures by the park superintendents and park rangers prevented the occurrence of any serious forest fires in the state parks. Two of these - both intentionally set - were at Hanging Rock State Park and burned only one-third of an acre. The person setting these fires was apprehended and brought to trial. The third fire was at Morrow Mountain State Park and burned six square feet. Swift action by field per-

sonnel kept these fires from reaching serious proportions.

The installation of radio communication systems in several of the state parks, the continued hearty cooperation of the Division of Forestry in the preparation of fire control plans and other protective measures, the purchase of additional patrol vehicles, making and maintaining friendly relations with park neighbors and keeping state park boundaries clearly marked and posted all helped to make protection more effective.

Due also to the excellent protection and law enforcement work of field personnel, vandalism and littering was less of a problem than it once was and an ideal atmosphere for family use was maintained at all state parks. A number of factors contributed to this, perhaps the most important of which were constant efforts to educate the public in good park manners, and a never-ceasing effort to keep the state parks clean and neat.

Only one building fire occurred during this report period. One of the ranger residences at Cliffs of the Neuse State Park was destroyed by fire on January 1,1959. This loss was partially covered by a payment of \$9,000 from the State Insurance

Fund.

The forces of nature did the worst damage to the state parks during this two year period. Trees and other vegetation in several state parks suffered considerable damage from the snow and ice storms of the late winter and early spring of 1960, the infestation of balsam wooly aphid at Mount Mitchell State Park reached serious proportions, and beach erosion at Fort Macon State Park continued to be a major

problem.

The balsam wooly aphid infestation at Mount Mitchell State Park was, and is, a matter of grave concern. Unless the infestation is controlled, every balsam tree in the park is threatened with destruction. Both the Division of Forestry and the United States Forest Service have worked intensively to find effective control measures. In 1958, the Southeastern Forest Experiment Station, in cooperation with the Divisions of Forestry and State Parks, made a detailed intensive study of the infestation. Based on the findings of this study, a pilot control project, financed jointly by Federal and State agencies, was carried out in the spring and summer of 1959 to determine what sprays and spraying methods would most effectively control the balsam wooly aphid. Two species of predators, imported from European and Near East countries, were also released on an experimental basis. The results of the pilot control project were carefully evaluated by experts and, in accordance with their advice and recommendations, contracts were let for spraying approximately 106 acres of forest land within Mount Mitchell State Park. This work was commenced in June 1960, and will be carried on to completion.

With a \$50,000 allotment granted from the Contingency and Emergency Fund by Governor Hodges and the Council of State, existing groins at Fort Macon State Park were rebuilt and strengthened and a considerable amount of beach nourishment was done. This work, completed in November 1958, has been effective in maintaining the usefulness of the present erosion control structures and in delaying further damage to dunes and shoreline. However, most of the beach nourishment has been washed away by storms and a great deal more work must be done to completely

stop beach erosion.

The State Parks Regulations were revised in January 1959 and copies were sent to the Clerk of Court in each of the 100 counties and posted as required by law.

State Lakes

The Division of State Parks is charged with the responsibility of administering seven State-owned lakes for pulic use. This is primarily a protection and law enforcement job. Three of these State lakes - Jones, Salters and Singletary in Bladen County - are within the boundaries of State parks and are administered under state park rules, regulations and policies. No unusual difficulties are involved in administering these three lakes.

The problems at the other four lakes are entirely different. Only part of the shoreline of Lake Phelps in Washington and Tyrrell Counties is bordered by state park land so this lake is administered primarily under the State Lakes Regulations. Because it does not receive heavy concentrated use, its administration does not

involve serious difficulties.

The Department owns no land around White and Black Lakes in Bladen County nor around Lake Waccamaw in Columbus County. Because of its inaccessibility, little use is made of Black Lake. White Lake and Lake Waccamaw receive heavy concentrated use and, because of the entire lack of State-owned land around them, the administration of these two lakes is beset with many problems and difficulties. Administration of these two lakes is the most difficult law enforcement job the Division of State Parks has. Despite this, and the fact that White Lake is badly overused, administration of the State Lakes continued to be effectively and efficiently done.

The State Lakes Regulations were revised in January 1959 and copies were sent to the Clerk of Court in each of the 100 counties and posted as required by law.

5. BUSINESS MANAGEMENT

Business management is a very important part of the varied and complex state park program. Accounting for expenditures and receipts; specifying and requisitioning a wide variety of supplies, materials and equipment; property inventorying and accounting; preparing payrolls; and keeping fiscal, equipment, operation and cost records are only a part of business management of the state parks. Upon the prompt and efficient execution of business management activities depends much of the success of the state park program. Among the activities carried on in this phase of state park wark during this biennium were periodic physical inventories of nonexpendable property at each state park, frequent merchandise inventories, and revision of parts of the Forms and Reports Manual.

Earned receipts from the operation of state park facilities during this biennium reached an all time high of \$282,208.20 - an increase of 12.3 percent over the previous biennium. These earned receipts amounted to 35.4 percent of the total

administration, operating and maintenance expenditures.

6. INFORMATION AND EDUCATION

The state parks continued to receive excellent publicity in the press, in periodicals and on radio and television. An outstanding example of this publicity was the series of nine articles on state parks featured in the September 1958 through May 1959 issues of NORTH CAROLINA EDUCATION, the official publication of the North Carolina Education Association.

The third, and best, edition of the state park brochure was published in March 1959. This edition has a color cover and contains complete information on the state parks. The brochure was so well received and so much in demand that a second printing was necessary. Copies of the brochure were sent to libraries, Chambers of Commerce, physicians, personnel directors and other selected mailing lists. A fourth edition of the brochure is now in preparation.

New publications prepared and issued included: A Guide to the Vegetotion of Mount Mitchell Stote Park and Check List of Plonts in Mount Mitchell Stote Pork

and on Mojor Hiking Troils Leading from the Pork.

Another measure of the ever growing interest in state parks is the number of requests for information on the state parks. Many more such requests were received during this biennium than during any similar period. On some days, over 100 inquiries were received. Thanks to the brochure and a systematic method of handling them, all inquiries were answered promptly.

New photographs and color slides were taken, classified, indexed and added to the photograph and color slide collections. The color slides have been much used to illustrate the talks given by both field and Raleigh Office personnel. Many such talks were made to a large variety of groups and organizations. In all these talks, indeed in all publicity whatever the media, stress was laid not on getting more people to the state parks but on the opportunities state parks offer for recreation, enjoyment

of natural beauty, and personal enrichment and refreshment.

More and more use is being made of the state parks for educational and research purposes. During this report period, many field trips were made to the state parks by school and college classes in connection with the study of the natural sciences and other subjects, and a number of scientists used the state parks in connection with research projects. Each year, school camps were conducted in one of the state parks by city school systems.

7. PERSONNEL ADMINISTRATION

The successful achievement of the mission of the Division of State Parks and the quality and quantity of the benefits and services the people of North Carolina receive from the state park system depend to a large degree upon state park employees. Much time and effort has, therefore been devoted to all phases of personnel administration from selecton of employees to systematic job performance evaluation. Constant review of the basic purpose and objective of the North Carolina State Park

system, annual park superintendents meetings, training sessions in specific phases of state park work, on-the-job training, review and revision of organization charts, preparation of detailed written job and operating routines for state park operation, and many other activities were carried on - all with the objective of helping each employee to do a first-class job of discharging his duties and responsibilities. These activities, together with modest salary increases, improvement and expansion of housing and working facilities and more adequate staffing of each state pork have resulted in a continued increase in the know-how, efficiency, production and morale of all state park employees.

As shown by the following tabulation, there was some turnover of personnel. As

far as possible, vacancies were filled by promotion of employees.

State Park	Position	Date Vacancy Occurred	Replaced by	Date of Replacement
Fort Macon	¹ Park Ranger II	5/31/59	Promotion of Park Ranger I from Hanging Rock	7/1/59
	¹ Park Ranger I	5/31/60	Not yet filled	
Hanging Rock	2 Park Ranger I	7/1/59	New employee	10/1/59
Jones, Singletary, and State Lakes	¹ Park Supt. I	5/23/58	New employee	7/1/58
Morrow Mountain	¹ Park Ranger II	11/15/58	Promotion of Park Ranger I at Morrow Mountain	12/1/58
	² Park Ranger I	12/1/58	New employee	12/1/58
Mount Mitchell	¹ Park Ranger II	5/31/60	New employee	6/1/60
Reedy Creek	¹ Park Supt. I	1/2/59	Pramotion of Park Ranger I at Reedy Creek	2/1/59
	² Park Ranger I	2/1/59	New employee	6/1/59
	³ Park Supt. I	6/10/59	New employee	8/17/59
William B. Umstead	¹ Park Ranger I	3/31/60	⁴ Park Ranger II at William B. Umstead	5/1/60
Raleigh Office	¹ Chief Park Naturalist	9/16/59	New employee	2/1/60
	¹ Landscape Architect	1/15/60	Nat yet filled	

Careful attention was, as usual, given to interviewing, selecting and employing the 84 full time summer employees. Much of the success of state park operation depends on these summer employees.

Four additional permanent employees (Park Ranger I at Fort Macon and Mount Mitchell State Parks, Park Attendant at Pettigrew State Park and Stenographer II in the Raleigh Office) and nine additional seasonal employees were authorized in the 1959-61 budget. The addition of these employees made it possible to further improve standards of operation and maintenance.

To comply with the letter and spirit of the State Minimum Wage Law, adjustments were made in the salaries of summer personnel to assure a minimum wage rate of

75¢ an hour.

8. PLANNING, DEVELOPMENT AND CONSTRUCTION

Planning

Thought and study were given to how many additional state parks will be reauired to meet current and future demands for state park facilities and to where new state parks should be located. Factors considered included probable size, composition and distribution of the state's population; probable increases in per capita

¹ Vacancy caused by resignation of employee.
² Vacancy caused by promotion of employee.
³ Vacancy caused by termination of employee.

⁴ This employee had been filling position of an employee an military leave who returned to

income; probable increases in leisure time; probable changes in mobility; responsibilities for outdoor recreation areas and facilities that should be assumed by counties, cities and towns; and the part private enterprise might play in providing outdoor recreation facilities. In addition to making its own studies and doing its own advance planning, the Division of State Parks has participated in surveys and studies concerning outdoor recreation resources being conducted by a number of agencies in-cluding the National Park Service, the Outdoor Recreation Resources Review Commission, and the American Forestry Association.

During this biennium, personnel of the Division designed, prepared working drawings, wrote specifications and supervised the construction of most of the projects included in the 1957 Capital Improvements Progarm as well as for some of the 1959 Capital Improvements Projects. In addition, Division personnel worked on preparation

of museum exhibits and a variety of other jobs.

At the request of the Committee on State Parks, a detailed study was made to assess the quality of all phases of the state park program. This report, entitled Evaluation of the Quolity of the North Carolina State Park Program and Comparison with the Quality of State Park Programs in Other States, was made with the assistance of persons of long and wide experience in state park work. After careful study of this report, the Committee recommended that the North Carolina State Park Program continue to be carried out in accordance with present policies and standards.

Land Acquisition

New Areas

Clearing title to Bear Island, which the Hammocks Beach Corporation is giving to the State, has been delayed by a number of circumstances beyond the control of the Department. Most of the difficulties have now been overcome, and the way cleared for proceeding with the friendly condemnation proceedings necessary to clear title to the island.

Additions to Existing Areas

One very important phase of the program to bring each existing state park to the highest possible standards - land acquisition - is well underway. Many interior holdings, and adjacent holdings having the effect of interior holdings, have been purchased and efforts are being made to acquire all remaining such holdings. Tracts purchased during this biennium are:

State Park	Purchased From	Date Purchased	Acreage
Cliffs of the Neuse	A. T. Garris	Dec. 22, 1958	0.11
Reedy Creek	J. W. Booth Estate Mrs. Mabel Booth Young L. C. Daniel Mrs. Eleanor Gore Claude H. McGhee	July 31, 1959 Aug. 4, 1959 July 30, 1959 July, 1959 June 28, 1960	10.1 34.0 40.0 5.0 2.61
William B. Umstead	"Fietta Blake Estate Mr. and Mrs. T. E. Slater Mr. and Mrs. J. W. King Lola Slater King and	Jan. 28, 1960 Jan. 28, 1960 Jan. 28, 1960	21.35 2.05 2.34
	Berbia Blake Cities of Raleigh and Durham) Counties of Wake and Durham)	Jan. 28, 1960 July 18, 1958	1.31 84.09
White Lake	⁴ Bladen Insurance and Realty Company	Aug. 22, 1958	.06

¹ Acquired by exchange of equal acreage of State-owned land.
² One-half interest acquired by purchase. Remaining one-half interest to be acquired by condemnation.

³ Acquired by exchange of 60.94 acres of State-owned land.
⁴ To be used for administrative purposes only.

Other tracts at Mount Mitchell, Reedy Creek and William B. Umstead State Parks are now in the process of being acquired.

Investigation of Proposed Areas

A number of areas were proposed for addition to the state park system and all were carefully investigated. One, an area of four acres containing what is claimed to be the oldest holly tree in the state, was not approved for inclusion in the state park system because it did not meet established standards. Another, Chimney Rock,

was nat appraved because the sum required ta purchase it, \$500,000, was not available and also because ather areas proposed far state parks have higher priarity. The Wilkes Reservair was re-examined but no change was made in the decisian nat to apprave its inclusian in the state park system. An area in Pender County, knawn as the Burgaw Prairie, was examined. Once a unique natural garden, the area has been so changed by agricultural development as to be unsuitable for state park use. Several sites in Henderson County proposed for state parks were investigated but nane were found to meet established standards.

Preliminary investigation was made of two public utility reservair areas - Duke Pawer Campany's Cowans Fard Reservoir lying in Mecklenburg, Iredell, Lincoln and Catawba Counties and Virginia Electric Power Campany's Gaston Reservoir in Halifax, Narthamptan and Warren Counties. Both reservoirs are under constuction and detailed investigations and surveys will be made af each to determine whether or nat

they are suitable for inclusion in the state park system.

DEVELOPMENT AND CONSTRUCTION

Most of the 36 prajects included in the 1957 Capital Improvements Apprapriation have been campleted or are in the last stages of construction. These projects have added a variety of much needed public use facilities and other improvements to the

state park system. The current status of each project is given in Table 3.

The 1959 Capital Impravements Appropriation af \$480,000 included three majar and twa minar projects. The three major projects are \$150,000 for land acquisition at Maunt Mitchell and ather state parks, \$150,000 far beach erosion contral at Fart Macan State Park, and \$172,000 far preliminary development of Hammocks Beach Bear Island) State Park. Surveys have been completed, appraisal made of, and negatiatians are naw underway with the awners far the purchase af land for addition ta Maunt Mitchell State Park. Bids were twice received on the erasian cantrol work at Fort Macon State Park and twice rejected as tao high. It is naw planned ta await campletian and publication of the Carps of Engineers-Beach Erasion Cantral Baard Study of beach erasion in the Fort Macon-Atlantic Beach Area before re-advertising far bids. Work an the Hammacks Beach State Park Projects must await successful conclusion of the friendly candemnatian praceeding and delivery af acceptable title ta the State. Of the two smaller projects, the \$1,500 project far repairs at Marrow Mauntain is almost camplete, and the \$7,000 project far repairs at Pettigrew State Park is underway.

In addition to capital improvements projects, a parking area at Maunt Jefferson State Park was built by the State Highway Commission with an allotment made by Gavernar Hodges from his Highway Surplus Fund and a boardwalk was completed at

Lake Waccamaw.

9. COOPERATION WITH AND SERVICES TO OTHER AGENCIES

The Divisian of State Parks coaperated in a variety of projects with other agencies and rendered a number of consultatory and other services to various public and private agencies during the biennium. Among the agencies with which the Divisian coaperated in various ways were the North Carolina Cape Hatteras Seashare Cammissian, Keep North Carolina Beautiful, the Armed Services, National Park Service, and a number of State agencies.

The Divisian has been mast fortunate in receiving hearty caaperatian and assistance fram a number of State and Federal agencies. Appreciation is particularly dueta the ather Divisians of the Department of Canservation and Develapment, the State Highway Cammission, the United States Farest Service, the National Park Service, and the Property Cantral and Canstructian Division of the Department of

Administration.

RECOMMENDATIONS FOR FURTHER PROGRESS

An enormous amount of work remains to be done to improve and expand the state park system to the point of adequately meeting the demands made upon it. To do this, the following must be done:

A. PROVIDE THE INCREASES IN THE STATE PARK MAINTENANCE BUDGET REQUIRED TO ADEQUATELY MAINTAIN AND OPERATE THE EXISTING STATE PARKS FOR PUBLIC USE.

State park budgets and state park personnel are still insufficient to adequately maintain and aperate the state parks for the volume of public use they receive. Much more should be done to carry out programs that provide for public use of the natural features of the state parks.

B. PROVIDE THE ADDITIONAL TECHNICAL PERSONNEL REQUIRED FOR SOUND PLANNING AND ECONOMICAL DEVELOPMENT OF THE STATE PARK SYSTEM.

An adequate staff of competent technical personnel is absolutely essential for sound planning and economical development of the state park system. The addition of two technical employees would make possible the careful advance planning necessary for economical and efficient development of the state park system.

C. PROVIDE THE CAPITAL IMPROVEMENTS APPROPRIATIONS REQUIRED TO COMPLETE LAND ACQUISITION AND DEVELOPMENT AT EXISTING STATE PARKS.

One of the most urgent jobs still to be done is the completion of land acquisition programs at the present state parks. Failure to acquire necessary lands has left most of the state parks with either interior holdings or irregular boundaries, or both. This is severely handicapping protection and development for public use. In some cases, protection of state property from fire, vandalism and other damage is made extremely difficult if not virtually impossible.

D. PROVIDE A LAND PURCHASE FUND FOR ACQUISITION OF NEW STATE PARKS.

The present number of areas in the state park system are too few to render reasonable service to the people of North Carolina. Additional areas are needed if the basic purposes and objectives of the state park program are to be achieved. These areas are necessary for three reasons: (1) to bring state park services to all sections of North Carolina; (2) to preserve certain areas for their greatest public benefit; and (3) to prevent the over-use and consequent deterioration of existing state parks. There are many gaps in the state park system that must be filled.

E. PROVIDE FUNDS FOR BUILDING PUBLIC USE FACILITIES ON NEW STATE PARKS.

Once they are acquired, roads, parking areas, sanitary facilities and a number of public use facilities will be needed in new state parks.

All of these recommendations should be carried out in strict accordance with Principles Gaverning the Establishment, Extensian and Development of the State Park System of the State of North Caralina and Park, Parkway and Recreational Area Study of North Caralina.

TABLE 1 STATE PARKS PUBLIC USE RECORD CAMPER DAYS

	Č	TOTAL			Z.	4										
NAME OF AREA	ATTEN	TENDANCE	PICNICKERS	KERS	TRAILER	LER	ORGA	ORGANIZED	SWIA	SWIMMERS	Ŧ	HIKERS	CABINS	S	FISHING	9
	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960	FY 1959	FY 1960
STATE PARKS:																
Cliffs of the Neuse	145,482	115,152	40,899	32,929	3,856	3,921			30,154	22,407	13,634 10,700	10,700			106	285
Fort Macon	1435,573	2427,722	50,432	45,891					103,164	86,189	7,442	7,089			50,500	49,835
Hanging Rock	172,828	179,339	64,246	52,840	13,822	15,557			47,211	40,364	31,831	25,244	2,131	3,283	135	
Jones Lake	68,164	64,460	53,914	51,259	723	648			13,068	10,882					264	347
Morrow Mountain	231,841	225,723	116,179	115,051	8,671	10,052			21,369	20,819	21,395	22,908	1,557	1,907	6,073	5,438
3 Mount Jefferson	4,875	8,130	1,722	2,728												
Mount Mitchell	312,007	242,642	54,815	50,608	3,670	3,790					2,964	3,092				
Pettigrew	20,062	21,538	4,235	4,014	545	991									3,166	3,232
Reedy Creek	27,163	32,789	22,530	24,014			4,050	3,325							4	92
Singletary Lake	9,843	11,048			18		5,710	5,856							380	315
William B. Umstead	170,932	158,871	46,440	44,894	3,932	4,503	14,711	11,300			21,741	18,443			263	142
TOTALS 1,598,770 1,497,414 455,412 424,228	1,598,770	1,497,414	455,412	424,228	35,237	39,462	24,471	20,481	214,966 180,661	180,661	100,66	88,674	4,688	5,190	60,891	59,686

¹ Includes 289,595 visitors to Fort Macon.
² Includes 283,683 visitors to Fort Macon.
³ Operated only July 1—September 15, 1956—June 1-30, 1959
⁴ Operated only July 1—September 15, 1959—June 1-30, 1960

GEODETIC SURVEY

The Geodetic Survey Division is in the process of being activated pursuant to Chapter 102, General Statutes, as amended by action of the 1959 Session of the General Assembly. A study of applications for the position of Director of this new Division has been made and interviews held with a number of technically qualified. men. A selection of the man and the prompt activation of the survey will take

place immediately after the end of the fiscal year 1959-60.

An outline of the functions of this Division is furnished under Table of Organization. Basically the duties of the Division are "To make or cause to be made from time to time such surveys and computations as are necessary to further or complete the North Carolina Coordinate System. The agency shall endeavor to carry to completion as soon as practicable the field monumentation and office computations of the Coordinate System. - - - "(1939,c.163,s.9) and under the law of 1959 (102-12) "shall prepare for publication and cause to be published before July 1, 1962, a map or maps setting forth the location for both horizontal and vertical control, together with such other pertinent data as the agency may direct for implementation of the North Carolina Coordinate System.- - -"

A geodetic survey is a survey which covers so large an area, such as a city, county or state, that the size and shape of the earth must be considered in the computation of the results. In order to save the local surveyor the task of computing his surveys with rather complex equations, a mathematical system, called the State Coordinate System, was developed whereon the usual methods of east-west and north-south coordinates were used. The tangeable, concrete survey monuments, which this Division is directed to establish, will be of inestimable value to all engineers and surveyors in their field of work. The field surveys, office computations and publication of the data for the public will be the major fields of endeavor for this new group. It will require many years of constant application, but each years added production

will have a snow-ball effect on the wide spread use of the system.

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Eula M. Lincoln	Accounting Clerk
Mrs. John C. Bagley	Accounting Clerk
Victor Barfield	Accountant
Latona P. Crabtree	Accounting Clerk
Letha P. Burgess	Stock Clerk
Stewart B. Tucker, Jr	Duplicating Machine Operator
Harold N. McClain	Duplicating Machine Operator
Gladys J. Gooch	Stenagrapher
Betsy S. Brawn	Stenagrapher Clerk
Betty J. Spence	Clerk
Peggy Bennett	Boakkeeping Machine Operator
Vernette Dean	
Herman Hintan	Janitor-Messenger

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James R. Denning	Phatagrapher
A. Evelyn Covington	Administrative Assistant
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Mildred F. Strickland	
Mildred B. Turner	Typist Clerk
Florence B. McLaurin	

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William C. Guthrie	.Industrial	Development	Representative
Allison D. Allison	.Industrial	Development	Representative
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Robert E. Leak	.Industrial	Development	Representative
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James D. Little, Jr			
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Patricia T. Allen			
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Alice E. Alderman			
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Doris M. Boseman			
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Enid H. Koss Stenogropher Clerk Potricia F. Hairr Stenogropher Clerk Fronces M. Falvey Stenogropher Clerk Virginia Satterfield Typist Clerk
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Lem H. Hardy, Jr. Engineer Doniel E. Sadler Engineer
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William R. Willis
Wilbur S. Godwin Potrol Boot Engineer Liston T. Yapp Inspector
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Betsy Shearin
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Charles B. Aycack Brown, JrForestry Pilat (District 8)
W. B. Flanner, Jr Development Project Supervisor
Regian I—Headquarters—New Bern
J. Paul Halland
S. B. Narris
J. T. Sullivan
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Regian I Air Facility—Headquarters—Jacksanville
A. A. Belt
W. A. Scatt Aircraft Mechanic Pilat
W. A. Statt
Regian II (Districts 3, 5, 6, 11) Headquarters—Raleigh Office
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H. L. Terry Regianal Farester (Raleigh Office) H. E. Campbell Forestry Pilat (District 6) J. T. Wright Radia Engineer (District 6) Graham J. Masely Radia Engineer (District II) Regian III (Districts 10, 12) Headquarters—District 10 Office, Lexingtan O. C. Gaadwin Regional Forester Lennard A. Kilian, Jr. Watershed Farester G. F. Rabertsan Forestry Aide (Soil Bank) DISTRICT PERSONNEL District Na. 1—Asheville B. H. Corpening District Farester
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H. L. Terry Regianal Farester (Raleigh Office) H. E. Campbell Forestry Pilat (District 6) J. T. Wright Radia Engineer (District 6) Graham J. Masely Radia Engineer (District 11) Regian III (Districts 10, 12) Headquarters—District 10 Office, Lexingtan O. C. Gaadwin Regional Forester Lennard A. Kilian, Jr. Watershed Farester G. F. Rabertsan Forestry Aide (Soil Bank) DISTRICT PERSONNEL District Na. 1—Asheville B. H. Corpening District Farester R. F. Penland Assistant District Farester M. N. Shaw, Jr. Service Forester W. L. Reeves District Ranger G. E. Bethea Watershed Farester
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Clayton State Forest Nursery
Moody Clemmons Forest Nurseryman Harry Clemmons Labor Foreman Walter LeRay Worley Nursery Foreman
Holmes State Forest Nursery
Homer Orr Labor Foreman
Little River State Forest Nursery
W. A. Bland
Edwards State Forest Nursery
D. L. Brenneman

FIELD PERSONNEL

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Rolph W. Soles Roy A. Hipps Clyde W. Curtis Jomes E. Rhodes James M. Chandler Monroe U. Morlowe J. Bruce Street Joseph B. Ritchie Corvos E. Porton John C. English

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Alexander Alleghony Ashe Avery Burke Coldwell Stokes Surry Wotaugo

Wikes

Forest Ronger
Forester

District No. 3

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A. B. Clork
J. B. McLeod
A. C. Forrell
Corl Wood
Trovis A. Wicker
V. E. McCrimmon
W. G. McCrimmon
Rober F. Freeman
D. R. Lockhort
A. R. McMillan

Anson Chathom Hoke Lee Montgomery Moore Moore Moore Richmond Scatlond

Forest Ranger
Forest Ronger
Forest Ronger
Forest Ronger
Forest Ronger
Forest Towermon
Forest Fire Equip. Opr.
Forest Ronger
Forest Ronger

District No. 4

Henry S. Woolard Thurmon W. Bonner Marvin D. Ormond Edmund M. Foremon James A. Powell W. Clavin Morris Laster T. Baker Kelly Morton Eugene C. Wells Odell Roynor Alfred D. Andrews B. E. McDoniel John L. Ives Clifton Heath Robert H. Kinsey George C. Dovis Vernon J. Doniels J. L. Hardison W. T. Lowrimore

Beoufort	
Beoufort	
Beoufort	
Carteret	
Corteret	
Craven Croven	
Croven	
Duplin	
Duplin	
Duplin	
Jones	
Lenoir Jones & Lenoir	
Jones & Lenoir Onslow	
Onslow	
Pomlico	
Sondy Run Assoc.	
State College Assoc.	

Forest Ranger Forest Ronger Forest Fire Equip. Opr. Forest Ronger Forest Fire Equip. Opr. Forest Ronger Forest Ronger Forest Ronger Forest Ronger Forest Ronger Forest Fire Equip. Opr. Forest Ronger Forest Ronger Forest Fire Equip. Opr. Forest Ronger Forest Fire Equip. Opr. Forest Ronger Forest Ranger Forest Ronger

District No. 5

Herbert E. Hathawoy, Jr.
Joseph A. Pearce
Zell C. Smith
Jardan W. Johnson
T. E. House
W. L. Lawrence, Jr.
Jodie Burgess
Leroy W. Wheeler
N. S. Tyson
Jomes P. Dickersan
W. F. Dovis
R. E. Denton

Farest Ranger Farest Ranger Forest Ranger Farest Ranger Edgecambe Franklin Greene Halifax Forest Fire Equip. Opr. Halifax Forest Ranger Nash Nash Forest Towerman Forest Ronger Forest Ronger Northampton Pitt Pitt Farest Fire Equip. Opr. Forest Ranger Forest Ranger Warren Wilson

District No. 6

Peter P. Smith
R. Bruce Culbreth
William J. Eosom
J. Ellis Byrd
Herman J. Whitley
Wode P. Crocker
William E. Herring
Henry B. Osborne
Milford E. Pennigton

Cumberland Farest Ronger Cumberland Forest Ranger Farest Fire Equip. Opr. Cumberlond Harnett Farest Ranger Farest Ranger Johnstan Johnston Forest Fire Equip. Opr. Sompson Forest Ranger Forest Fire Equip. Opr. Sompson Woyne Forest Ranger

District No. 7

Miles J. White
James M. Costelloe
Montelle B. Williams
Roger C. Spivey
Harry L. Longston, Jr.
Chorles M. Edwards
Mills J. Williams
M. H. Leggett
Graham C. Harris
Lewis Stallings

Bertie Forest Ronger Bertie Forest Fire Equip. Opr. Forest Ranger Forest Ranger Forest Ronger Forest Ranger Camden Chowan Gotes Hertford Hertford Forest Fire Equip. Opr. Farest Ranger Forest Ronger Martin Pasquotank Perquimans Forest Ronger

District Na. 8

Frank B. Sholar
Curtis W. Sessoms
Kenneth D. Johnson
Lester L. Edwards
J. B. McDowell
B. Frank Batten
Charles T. Butler
M. J. Lanier
James V. Costeen
Broddie N. Pait
David E. Corter
Joseph A. Stricklond
S. J. McKoy
G. T. Reid
John P. Millicon
Beamon Strickland
A. Roy Dyson
Alvo O. Squires
James A. Dovis

Bloden Bladen Bruswick Bruswick Brunswick Columbus Columbus Pender Pender Robeson Robesan Robeson Holly Shelter Assoc. Orton Assoc. Riegel Assoc. Riegel Assoc. Sou. Bruns. Assoc. Woccomaw Assoc. Woccamaw Assoc.

Forest Ronger
Forest Fire Equip. Opr.
Forest Ronger
Forest Fire Equip. Opr.
Forest Ronger
Forest Fire Equip. Opr.
Forest Ranger
Forest Fire Equip. Opr.
Farest Ranger
Forest Ranger
Forest Ronger
Forest Ronger
Forest Ronger
Forest Ranger

District No. 9

Horold E. Hatchett Jock H. Porker John A. McKeldrey R. E. Caldwell Charles Evans Robert J. Bryson Wode A. Sutton Clark Grissom Cherokee Cloy Groham Hoywood Jackson Macon Swain Tronsylvonio Forest Ronger

District No. 10

Bryont Broswell, Jr. John F. Spivey, Jr. Ronald A. Brown John C. Davis Jack M. Farmer

Dovidson Guilford Iredell Rondolph Yadkin Forestry Aide Forester Forester Forestry Aide

District No. 11

Robert B. Jones William D. Colville D. C. Critcher John D. Horris R. C. Daniel C. W. Stoffregen, Jr. George E. Tilley Herman P. Tillerson Durhom Granville Alamance Oronge Vonce Woke Wake Coswell Forestry Aide
Forestry Aid (Soil Bonk)
Forest Ronger
Forestry Aide
Forest Ronger
Forestry Aide
Forest Ronger
Forestry Aide

District No. 12

Edword N. Seltzer Stonley R. Swonson Paul Dovis John U. Perry John S. Howk John W. Stokes Corbarrus Cotowbo Clevelond Goston Lincoln Stonly Forester Forester Forester Forester Forester Forester

District No. 13

Done Roten
B. C. Simons
Mocon O. Howord
J. Edword Swoin
Morvin Volivo
W. E. Speor
Richord L. Davenport

Dore
Hyde
Hyde
Tyrrell
Tyrrell
Woshington
Woshington

Forester Forest Ronger Forest Fire Equip. Opr. Forest Ronger Forest Fire Equip. Opr. Forest Ronger Forest Fire Epuip. Opr.

DIVISION OF GEODIC SURVEY

Philip C. Doron Director
Helen B. Brothers Stenogropher Clerk

DIVISION OF MINERAL RESOURCES

Dr. J. L. StuckeyState GeologistStephen G. ConrodAsistonts Stote GeologistJomes F. ConleyGeologistOscor B. EckhoffGeologistWilliom F. WilsonGeologistPenny R. StomotelosStenogropher Clerk

DIVISION OF STATE PARKS

Administration
Thamas W. Marse Thamas C. Ellis Assistant Superintendent State Parks Wilbur C. Fuller Jahn R. Kibler Canley L. Maffett George E. Wiles Malter K. DeBerry Mary E. Sanders Larraine C. Harrald Rebecca O. Strickland Stenographer Carnell W. Chappell Superintendent State Parks Assistant Superintendent State Parks Assistant Superintendent State Parks Building Maintenance Supervisation Stenagrapher Clerk Carraine C. Harrald Stenagrapher Clerk Rebecca O. Strickland Stenographer Carnell W. Chappell Accaunting Clerk
Cliffs af the Neuse, Wayne County
Bruce Price Park Superintendent Richard H. Siler Park Ranger Gardan Price Park Ranger
Fart Macon, Carteret County
Ray S. Pardue Park Superintendent Oren O. Hawkins Park Ranger
Hanging Rack, Stokes County
George H. Sutton Park Superintendent Carl R. Flinchum Park Ranger Charles H. Miltan Park Ranger James R. Speer Park Ranger
Bear Island State Park, Onslaw County
Janes and Singletary Lake Camp, Bladen County
Myers G. Braxtan Park Superintendent Dewitt Powell Park Ranger Eddie S. Rich Maintenance Man
Marraw Mauntain, Stanly Caunty
Cedric P. Squires Park Superintendent James C. Gulledge Park Ranger Clyde H. Miller Park Ranger Charlie J. Mills Park Ranger
Maunt Jeffersan Area, Ashe Caunty
Maunt Mitchell, Yancey Caunty
Smith Ray Park Superintendent Clyde Hapsan Park Ranger
Pettigrew, Washington and Tyrrell Counties
Thamas H. Hamptan Park Ranger Robert J. Speer Park Attendant
Reedy Creek, Wake County
James C. Jahnsan Park Superintendent Charles O. Lucas Park Ranger
State Lakes, Bladen County
James H. McQueenPark Ranger

William B. Umstead, Wake County

Haywood L. Dillard	Ranger
John D. Barnett	Ranger
Howard W. Sorrell	Ranger

KERR RESERVIOR DEVELOPMENT COMMISSION

N. Warren Weldon	Chairman
Paul M. Anderson	Park Superintendent
Lemuel P. Eastwood	Park Ranger
Wm. L. Twisdale	Maintenance Man
Jesse J. Stem, Jr.	

DIVISION OF STATE PLANNING

Robert D. Barbour	Administrator-Community Planning
John H. Vorhees	
Jame E. Sims	
Lola T. Bailey	

DIVISION OF COMMUNITY PLANNING

Lindsey W. Cox, Jr	Planner
Durwood S. Curling	
Paul A. Hofmann	
Philip W. Dondero	Planner
Jerry M. Turner	Planner
John G. Scott	Research Analyst
Evelyn F. Brantley	Draftsman
Wendell L. Denton, Jr.	Draftsman
Frances Poole	Typist
Julie P. Hardee	Typist

CONSERVATION AND DEVELOPMENT BUDGETS

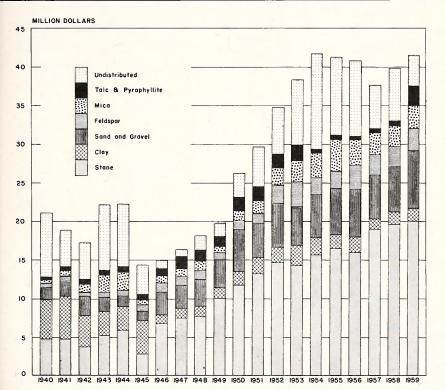


Figure I.— Volue of stone, cloy, sond ond grovel, feldspar, mico, tolc and pyrophyllite, ond tatal value of mineral production in North Corolino, 1940—1959. Undistributed volues include obrasive stones, osbestos, copper, gold, lead, silver, olivine, tungsten concentrates, etc.

THE BUDGETS

CONDENSED FINANCIAL STATEMENTS

For the Biennium Beginning July 1, 1958 and Ending June 30, 1960

S. C. Holden, Auditor

MAINTENANCE FUNDS

DEPARTMENT OF CONSERVATION AND DEVELOPMENT STATEMENT OF RECEIPTS AND DISBURSEMENTS

	F	iscal Year 1958-59		al Year 59-60
	Disbursements \$3 Less: Receipts 1	3,767,570 1,464,534	\$3 1	,818,864 ,518,374
	General Fund Appropriation\$2	2,303,036	\$2,	,300,490
MMUZ	ARY BY PURPOSE			
· 1.	ADMINISTRATION ·			
	Disbursements—Appropriation\$	98,182	\$	93,712
	Less: Receipts			175
	Appropriation\$	98,182	\$	93,537
11.	COMMERCE AND INDUSTRY:			
	Disbursements—Appropriation\$	208,152	\$	267,802
111.	ADVERTISING:			
	Disbursements—Appropriation\$ Less: Receipts	494,430	\$	533,205 28
	Appropriation	494,430	\$	533,177
IV.	WATER RESOURCES, INLETS AND COASTAL WATERWAYS:			
	Disbursement\$ Less: Receipts	122,870 7,926	Dep	Separate partment
	Appropriation\$	114,944	Est	tablished
٧.	MINERAL RESOURCES:			
	Disbursements—Appropriation \$ Less: Receipts \$	68,105 2,445	\$	61,047 1,617
	Appropriation\$	65,660	\$	59,430
VI.	FORESTRY:			
	Fire Control			
	Disbursement\$1 Less: Receipts		\$1,	,698,841 730,188
	Appropriation\$	833,993	\$	959,653
	General Forestry			
	Disbursement Less: Receipts	54,141 7,2 1 1		53,762 6,963
	Appropriation\$	46,930	\$	46,799
	Forest Management			
	Disbursement \$ Less: Receipts	122,552 51,250	\$	133,559 55,866
	Appropriation\$	71,302	\$	77,693
	Nurseries (4)			
	Disbursement\$ Less: Receipts	445,824 400,921	\$	381,772 356,962
	Appropriation	44,903	\$	24,810

	Bladen Lakes State Forest Disbursement\$	158,909	\$ 179,726
	Less: Receipts	164,417	182,235
	Appropriation	— 5,508	\$ —2,509
/11.	PARKS:	200 (52	£ 415 430
	Disbursements\$ Less: Receipts	380,653 137,384	\$ 415,438 154,168
	Appropriation\$	243,269	\$ 261,270
11.	DRAINAGE OF LAKE PHELPS:		
	Disbursements—Appropriation\$	6,967	
X.	FORT MACON EROSION CONTROL:	50 (10	
	Disbursements—Appropriation\$	58,640	
Х.	DEFERRED OBLIGATIONS:		
	Disbursements—Appropriation Transferred to Succeeding Year\$	21,172	
KI.	LESS: RECEIPTS		
	Funds transferred from Preceding Year		\$ 21,172
	TOTAL DISBURSEMENTS	3,767,570	\$3,818,864 \$1,518,374
	TOTAL DISBURSEMENTS FROM APPROPRIATION		\$2,300,490
		2,303,030	\$2,300,470
	SUMMARY OF DISBURSEMENTS—BY OBJECTS:	100 415	\$2 201 223
	Salaries and Wages \$2 Supplies and Materials Postage, Telephone, and Telegraph Travel Expense Postage Britains	171,110 70,206 91,031 50,986 204,382 14,707	\$2,201,223 157,814
	Postage, Telephone, and Telegraph	70,206 91,031	76,573 98,716
	Printing and Binding Motor Vehicle Operation Lights, Power, and Water Repairs and Alterations	50,986	78,194 204,367
	Motor Vehicle Operation	204,382	204,367
	Repairs and Alterations	105.639	16,669 86,559
		105,639	132,635
	Direct Advertising Federal Cooperation—	375,600	384,999
	U. S. Geological Survey	107,199 20,515	5,500 32,351
	Deep River Coal Survey Fort Macon Erosion Control		2,699
	Infestation Control	58,640	30
	Drainage of Lake Phelps Ocracoke Island Ground Water Insurance and Bonding Equipment	6,967	3,500
	Insurance and Bonding	3,913	19,240
	Additions and Betterments	194,771 29,346	\$ 275,514 57
	Stores for Resale—Parks	35,466	42,224
	Geologic Map Project Transferred to Succeeding Year		
	Deferred Obligations	21,172	
	Totals\$	3,767,570	\$3,818,864
	SUMMARY OF RECEIPTS		
	Social Security Refund	5,125	\$ 31
			388
	Sale of Publications—Water Resources Sale of Publications—Mineral Resources Cooperation—Board of Health	51 2,445	1,617
	Cooperation—Board of Health	2,750	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Water Investigation Sale of Publications—Forestry Federal Cooperation—Forestry County Cooperation—Forestry Private Cooperation—Forestry Sale of Tree Seedlings—Forestry Receipts Bladen Lakes State Forest		489
	County Cooperation—Forestry	382,810 320,719	407,503 341,698
	Private Cooperation—Forestry	48,424	50,494
	Sale of Tree Seedlings—Forestry	374,642 173,025	331,611 190,243
	Sale of Forest Floadets	2,202	2,852
	Machine Rental	1,347	3,494
,	Permits, Parks State Lakes Park Concession	14,200 118,075	14,952 124,831
	State Sales Tax	49	295
	Rentals From Employees	15,784 2,886	17,704
	Rentals From Employees Insurance Fire Loss Funds Transferred From Preceding Year	2,000	9,000 21,1 7 2
	Totals\$	1,464,534	\$1,518,374
		, ,	4.,510,574

DIVISION OF COMMERCIAL FISHERIES

Statement of Receipts and Disbursements OPERATING FUND Biennium 1958-60

Diennium 1730-00					
	1958-59	1959-60			
Disbursements\$ Less: Receipts	225,836 110,720	\$ 244,441 114,405			
General Fund Appropriation	115,116	\$ 130,036			
SUMMARY BY PURPOSE					
I. ADMINISTRATION AND INSPECTION .\$ II. OPERATION PATROL BOATS III. SHELLFISH SANITATION	127,528 97,644 664	\$ 139,263 103,525 1,653			
TOTAL DISBURSEMENTS\$	225,836	\$ 244,441			
SUMMARY OF DISBURSEMENTS-BY OBJECTS:					
Salaries and Wages	137,770 13,047 1,877 19,280 1,189 14,392 1,322 19,581 2,298 1,308 13,772	\$ 152,620 14,012 1,661 22,220 935 13,174 1,537 19,330 3,478 1,276 14,198			
Totals\$		\$ 244,441			
	223,630	\$ 244,441			
SUMMARY OF RECEIPTS: Food Fish Licenses and Taxes \$ Oyster Licenses and Taxes Clam Licenses and Taxes Crab Licenses and Taxes Menhaden Licenses Power Boat Licenses Escallop Licenses and Taxes Other Sources	4,467 16,293 2,388 9,675 25,058 48,159 915 3,765	\$ 7,060 19,376 3,065 - 9,005 21,378 49,610 780 4,131			
Totals\$		\$ 114,405			
DIVISION OF COMMERCIAL FISHERIES Statement of Receipts and Disbursements SHELLFISH FUND					
Biennium 1958-60					
	1958-59	1959-60			
REVENUE: Appropriation\$ Less: Total Disbursements	115,995 88,942	\$ 107,520 101,782			
Balance	27,053	\$ 5,738			
SUMMARY OF DISBURSEMENTS—BY OBJECTS					
Salaries and Wages \$ Supplies and Materials \$ Travel Expense \$ Gas and Oil \$ Repairs and Alterations \$ Contract Oyster and Shell Planting \$ Equipment \$ Insurance \$	17,605 622 2,725 354 1,504 65,431 386 315	\$ 19,955 837 2,892 401 6,375 70,337 408 577			
Totals\$	88,942	\$ 101,782			

STATE PLANNING PROGRAM

Statement of Receipts and Disbursements Biennium 1958-60

Biennium 1958-60			
REVENUE:			
General Fund Appropriation\$	1958-59 27,851	19:	59-60 34,705
SUMMARY OF DISBURSEMENTS-BY OBJECTS			
Salaries and Wages	21,347 781 606 2,307 125 94 95 2,496	\$	16,700 1,690 522 1,288 96 481 8,942 4,986
Tatals\$	27,851	\$	34,705
KERR RESERVOIR DEVELOPMENT COMMI	SSION		
Statement of Receipts and Disbursemen	ts		
Biennium 1958-60			
REVENUE:	1958-59	19	59-60
General Fund Apprapriation	24,599	\$	26,077
SUMMARY OF DISBURSEMENTS—BY OBJECTS Salaries and Wages Supplies and Materials Pastage, Telephane, Telegraph Travel Expense—Commissianers Printing and Binding Matar Vehicle Operatian Lights, Pawer, Water Repairs and Alteratians Equipment Additians and Betterments Insurance	12,852 860 250 246 53 1,392 320 398 326 7,848 54	\$	20,147 699 466 188 99 1,600 448 670 1,700
Tatals\$	24,599	\$	26,077
RESEARCH TRIANGLE			
Biennium 1958-60			
Statement of Receipts and Disbursement	ts		
REVENUE:	1958-59	19	59-60
General Fund Apprapriation		\$	100,000
SUMMARY OF EXPENDITURES BY PURPOSE: Grant-in-Aid		\$	100,000
COMMERCIAL FISHERIES ADVISORY BO	ARD		
Statement of Receipts and Disbursement	ts		
Biennium 1958-60			
REVENUE:	1958-59	19	59-60
Appropriation—Contingency and Emergency Fund \$\\ \\$\\$ Less: Tatal Disbursements	3,375 3,375	\$	2,000 1,127
Balance Reverted to General Fund	NONE	\$	873
SUMMARY OF DISBURSEMENTS—BY OBJECTS Travel Expenses—Cammissianers \$ Postage, Telephane, and Telegraph General Expense	3,295 30 50	\$	1,127
Tatals\$	3,375	\$	1,127

ATLANTIC STATES MARINE FISHERIES COMMISSION

Statement of Receipts and Disbursements

Biennium 1958-60

REVENUE:	958-59	195	9-60
Appropriation—Contingency and Emergency Fund	1,000	\$	1,500
SUMMARY OF DISBURSEMENTS-BY OBJECTS			
Payment to Commission on Expenses\$	1,000	\$	1,500

COMMISSION TO STUDY THE OPERATION OF MOTOR BOATS

Statement of Receipts and Disbursements

Biennium 1958-60

REVENUE:	958-59	1959-60
Transferred From Preceding Year\$ Less: Total Disbursements	300 260	NONE
Balance Reverted to General Fund	40	NONE
SUMMARY OF DISBURSEMENTS—BY OBJECTS Travel Expense—Commissioners	260	NONE

STATE ADVISORY COMMITTEE ON AVIATION

Statement of Receipts and Disbursements

Biennium 1958-60

REVENUE:	1958-59	195	59-60
Appropriation		\$	1,000 95
Balance Reverted to General Fund		\$	905
SUMMARY OF DISBURSEMENTS—BY OBJECTS: Travel Expense of Committee		\$	95

KERR RESERVOIR DEVELOPMENT COMMISSION

Biennium 1958-60

SPECIAL FUND

Statement of Receipts and Disbursements

1958-59

1959-60

REVENUE:			
Rentals from Property\$ Sale of Lumber	3,537	\$	1,733
Funds Transferred From Preceding Year	501		500
Totals\$	4.038	S	2.358
Less: Total Disbursements\$	4,038 3,538	\$	2,358 1,087
Balance Transferred to Succeeding Year	500	\$	1,271
SUMMARY OF DISBURSEMENTS-BY OBJECTS			
Supplies\$		\$	299
Equipment Permanent Buildings and Improvements	680 2,858		788
Totals	3.538	\$	1.087

SOIL BANK PROGRAM

Biennium 1958-60

SPECIAL FUND

Statement of Receipts and Disbursements

REVENUE:	1958-59	19	59-60
Appropriation—Federal Trust Fund	72,711 1,387	\$	56,320 34,769
Tatal \$ Less: Tatal Disbursements \$	74,098	\$	91,089
Less: Tatal Disbursements\$	39,329	\$	32,801
Balance Transferred to Succeeding Year	34,769	\$	58,288
SUMMARY OF DISBURSEMENTS-BY OBJECTS			
Salaries and Wages	30,057 503 110 2,389 4,226 1,794 250	\$	24,026 537 102 2,198 4,418 1,516
Total\$	39,329	\$	32,801

STATE PLANNING PROGRAM—COMMUNITY PLANNING

Biennium 1958-60

SPECIAL FUND

Statement of Receipts and Disbursements

REVENUE:	1958-59	19	59-60
Federal Planning Grant \$ State Cast	21,211 30,823	\$	53,361 4,031 34,981 15 30,151
Tatal	52,034 21,883	\$ \$	122,539 96,990
Balance Transferred to Succeeding Year	30,151	\$	25,549
SUMMARY OF DISBURSEMENTS BY OBJECTS: Salaries and Wages	13,203 364 31 1,802 470 663 5,350	\$	44,201 800 215 3,432 1,847 2,485 44,010
Totals\$	21.883	\$	96,990

WATERSHED PROJECT

Biennium 1958-60

SPECIAL FUND

Statement of Receipts and Disbursements

	1958-59	1959-60
REVENUE: Apprapriation-Federal Trust Fund\$ Funds Transferred Fram Preceding Year	11,138	\$ 13,814 3,702
Tatal \$ Less: Disbursements \$	11,138 7,436	\$ 17,516 \$ 14,445
Balance Transferred\$	3,702	\$ 3,071

SUMMARY OF DISBURSEMENTS BY PROJECTS:	
DEEP AND ABBOTT	\$ 7,287 6,977 181
\$ 7,436 SUMMARY OF DISBURSEMENTS BY OBJECTS:	\$ 14,445
Salaries and Wages \$ 4.388	\$ 8,795
Supplies and Materials	604
Pastage, Telephane, and Telegraph	89 382
Matar Vehicle Operation	1,233
Equipment 1,740 General Expense 218	2,634 708
Tatals	\$ 14,445
CAPE HATTERAS SEASHORE COMMISSION	
Statement of Receipts and Disbursements	
Permanent Improvement Fund of 1951	
REVENUE:	TO DATE
Funds Transferred From:	£ 7/0.000
Cape Hatteras Seashore Cammissian, (Cade 612) Permanent Impravement Fund af 1949, (Code 3171-1953) Conservation and Develapment, (Cade 3171-1953)	\$ 768,233 10,000 40,000
Tatal Revenue	
Unexpended Balance	\$ 5,487
Land Acquisitian	\$ 812,746
TRYON PALACE COMMISSION	
Statement of Receipts and Disbursements	
Permanent Improvement Fund of 1949	
REVENUE:	TO DATE
Praceeds First Latham Trust \$118,386 Praceeds Second Latham Trust 619,444 Praceeds Residue Latham Estate Funds 2,039,518	
Rentals	
Rentals	\$2,780,233
Rentals	\$2,780,233
Tatal Revenue	\$2,780,233
Rentals 2,885 Tatal Revenue	\$2,780,233
Rentals	\$2,780,233
Tatal Revenue	\$2,780,233
Rentals	\$2,780,233 2,772,444
Rentals	
Rentals	2,772,444
Rentals 2,885 Tatal Revenue LESS: DISBURSEMENTS Architect's Fees and Furnishings \$703,600 Dacumentary Research 14,257 Physical Research 182,718 New Construction 1,422,228 Land Acquisition 449,641 Tatal Unexpended Funds PERMANENT IMPROVEMENT FUNDS	2,772,444
Rentals	2,772,444
Rentals 2,885 Tatal Revenue LESS: DISBURSEMENTS Architect's Fees and Furnishings \$703,600 Dacumentary Research 14,257 Physical Research 182,718 New Construction 1,422,228 Land Acquisition 449,641 Tatal Unexpended Funds PERMANENT IMPROVEMENT FUNDS	2,772,444
Rentals 2,885 Tatal Revenue LESS: DISBURSEMENTS Architect's Fees and Furnishings \$703,600 Dacumentary Research 14,257 Physical Research 182,718 New Construction 1,422,228 Land Acquisition 449,641 Tatal Unexpended Funds PERMANENT IMPROVEMENT FUNDS STATE PARKS	2,772,444 \$ 7,789
Rentals 2,885 Tatal Revenue LESS: DISBURSEMENTS Architect's Fees and Furnishings \$ 703,600 Dacumentary Research 14,257 Physical Research 182,718 New Construction 1,422,228 Land Acquisition 449,641 Tatal Unexpended Funds PERMANENT IMPROVEMENT FUNDS STATE PARKS Statement of Receipts and Disbursements Permanent Improvement Fund of 1947 REVENUE:	2,772,444 \$ 7,789
Rentals 2,885 Tatal Revenue LESS: DISBURSEMENTS Architect's Fees and Furnishings \$703,600 Dacumentary Research 14,257 Physical Research 182,718 New Construction 1,422,228 Land Acquisition 449,641 Tatal Unexpended Funds PERMANENT IMPROVEMENT FUNDS STATE PARKS Statement of Receipts and Disbursements Permanent Improvement Fund of 1947	2,772,444 \$ 7,789
Rentals 2,885 Tatal Revenue LESS: DISBURSEMENTS Architect's Fees and Furnishings \$703,600 Dacumentary Research 14,257 Physical Research 182,718 New Construction 1,422,228 Land Acquisition 449,641 Tatal 1449,641 Tatal 1541 Unexpended Funds PERMANENT IMPROVEMENT FUNDS STATE PARKS Statement of Receipts and Disbursements Permanent Improvement Fund of 1947 REVENUE: Appropriation, Chapter 622, Public Laws af 1947 Purchase af Tryon Palace Land 1949 Purchase af Tryon Palace Land 55,000 1949 Permanent Improvement Fund (Code 1649) 10,000 Tryan Palace Project, Special Fund (Code 21) 12,449 Tatal Funds far Purchase af Tryan Palace Land	2,772,444 \$ 7,789 TO DATE \$ 500,000
Rentals 2,885 Tatal Revenue LESS: DISBURSEMENTS Architect's Fees and Furnishings \$703,600 Dacumentary Research 14,257 Physical Research 182,718 New Construction 1,422,228 Land Acquisition 449,641 Tatal 17 Unexpended Funds PERMANENT IMPROVEMENT FUNDS STATE PARKS Statement of Receipts and Disbursements Permanent Improvement Fund of 1947 REVENUE: Appropriation, Chapter 622, Public Laws af 1947 Purchase af Tryon Palace Land 55,000 Conservation and Development (Cade 3171) 55,000 1949 Permanent Improvement Fund (Cade 1649) 10,000 Tryan Palace Project, Special Fund (Code 21) 12,449	2,772,444 \$ 7,789 TO DATE \$ 500,000

PROJ	ECTS:	APPROPRIATION	EXPENDITURES	UNEXPENDED
1.	CLIFFS OF THE NEUSE	\$ 57,000	\$ 56,888	\$ 112
11.	CRABTREE CREEK	94,000	93,577	423
III.	FORT MACON		29,994	6
IV.	HANGING ROCK		87,489	5,511
V.	JONES LAKE	30,000	25,500	4,500 393
VI.	MORROW MOUNTAIN		92,607	
VII.	MOUNT MITCHELL		49,456	6,544
VIII.	PETTIGREW		29,966	34
IX.	SINGLETARY LAKE		16,967	33
X.	TRYON PALACE LAND	227,449	227,448	1
	Totols	\$ 727,449	\$ 709,892	\$ 17,557

DIVISION OF COMMERCIAL FISHERIES

Statement of Receipts and Disbursements Permonent Improvement Fund of 1949

REVENUE: T	O DATE
Appropriotion, Chopter 1249, Public Lows of 1949\$ Sole of Boots ond Equipment	50,000 36,244
Totol Revenue	86,244 85,524
Unexpended Bolonce\$	720

STATE PARKS

Stotement of Receipts and Disbursements Permonent Improvement Fund of 1949

rermonent improve	ement rung of	1747	
REVENUE: Appropriation, Chapter 1248, Public Lows of Funds Tronsferred From 1952-53 Code 3171	1949	 \$ 26,500	TO DATE \$1,074,144
Cooperation State Highway and Public Works Commission—Umstead Park Paving			71,500
Totol Revenue Less: Disbursements			1,145,644 1,090,567
Unexpended Appropriation			\$ 55,077
PROJECTS:	PPROPRIATION	EXPENDITURES	UNEXPENDED
I. CLIFFS OF THE NEUSE	243,485 95,208	\$ 124,139 250,552 95,010 122,897	\$ 22 2,933 198 6,388
of 1947) VI. JONES LAKE VII. MORROW MOUNTAIN VIII. MOUNT MITCHEL IX. PETTIGREW X. TOWN CREEK INDIAN MOUND XI. CAPE HATTERAS XII. RENDEVOUS MOUNTAIN AREA XIII. MOUNT JEFFERSON AREA XIV. BEAR ISLAND AREA XV. REEDY CREEK	10,000 38,016 80,779 208,700 31,360 25,260 50,000 1,929 2,115 3,000 92,346	10,000 38,008 78,154 188,421 26,968 25,252 50,000 1,833 1,888 3,000 74,445	2,625 20,279 4,392 8 96 227
TOTALS\$	1,145,644	\$1,090,567	\$ 55,077

FORESTRY AND STATE PARKS

Statement of Receipts and Disbursements

CAPITAL IMPROVEMENT FUND OF 1957

REVENUE: Appropriation Chapter 1341, Public Laws of 1957 Sale of Timber \$4,910 Plans and Specification Forfeitures 200 Department of Motor Vehicles 1,489	TO DATE \$ 688,000
Total Receipts	6,599
Total Revenue	\$ 694,599 547,652
Unexpended Appropriation:	\$ 146,947
PROJECTS: APPROPRIATION EXPENDITURES	UNEXPENDED
CLIFFS OF THE NEUSE	\$ 10,733 6,804 12,255 13 16,616 45,308 130 35,258 19,289
Totals\$ 694,399 \$ 547,652	\$ 146,947

KERR RESERVOIR DEVELOPMENT COMMISSION

Statement of Receipts and Disbursements

CAPITAL IMPROVEMENT FUND OF 1957

REVER	IUE:	TO DATE	
Less:	Appropriation, Chapter 1341, Public Laws of 1957		
	Unexpended Appropriation	\$ 43	
PROJE	CTS: APPROPRIATION	EXPENDITURES	UNEXPENDED
Buildi	ngs and Other Improvements\$ 22,000	\$ 21,957	\$ 43

FORESTRY AND STATE PARKS Statement of Receipts and Disbursements CAPITAL IMPROVEMENT FUND OF 1959

REVENUE:	TO DATE
Appropriation, Chapter 1039, Public Laws of 1959 Less: Transferred to Department of Water Resources	\$1,173,500
Appropriation—Forestry and Parks Less: Disbursements	\$ 573,500 41,606
Unexpended Balance	\$ 531.894

PROJECTS:		APPROPRIATION	EXPENDITURES	UNEXPENDED
1.	BEAR ISLAND	150,000	\$	\$ 1 72 ,000 150,000
111.	MORROW MOUNTAIN	1,500	1,470	30
IV.	PETTIGREW	7,000		7,000
V. VI.	LAND ACQUISITION—PARKSFORESTRY	150,000		150,000
	(Seed Extractory Building)	25,000		25,000
VII.	FORESTRY			
	(Irrigation—Clayton)	9,200	9,188	12
VIII.	FORESTRY			
	(Irrigation—Goldsboro)	20,000		20,000
IX.	FORESTRY			
	(Tower Residence—Edgecombe)	7,000	6,507	493
X.	FORESTRY			
	(Tower Residence—Southern Pines)	7,000	6,383	617
XI.	FORESTRY	1 000		10.
	(Tower Road—Mitchell)	1,000	866	134
XII.	FORESTRY	2.000	0.000	
24111	(Tower Cabin—Mitchell)	3,000	2,999	
XIII.	FORESTRY	0.000	200	1.400
VIV	(Tower Cabin—Cleveland)	2,000	398	1,602
XIV.	FORESTRY	0.000	4.050	2.750
VII	(Tower—Caswell)	8,800	6,050	2,750
XV.	FORESTRY (Tower—New Hanover)	10,000	7,745	2,255
	(Tower—New Harlover)	10,000	7,743	2,255
	Totals	\$ 573,500	\$ 41,606	\$ 531,894

KERR RESERVOIR DEVELOPMENT COMMISSION

Statement of Receipts and Disbursements

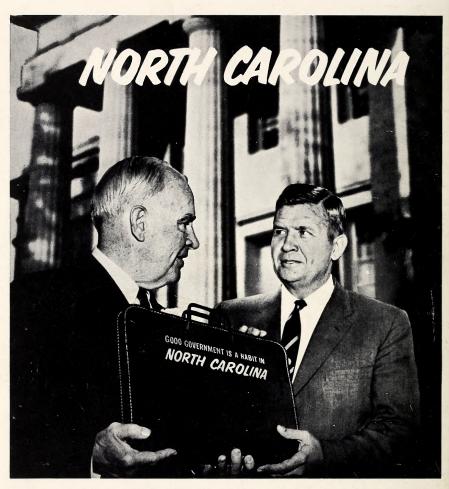
CAPITAL IMPROVEMENT FUND OF 1959 Biennium 1958-60

REVENUE: Appropriation, Chapter 1039 of Public Laws of 1959 Less: Disbursements		TO DATE \$ 40,000 25,064
Unexpended Balance		\$ 14,936
PROJECTS: APPROPRIAT	ION EXPENDITURES	UNEXPENDED
1. BULLOCKSVILLE PARK \$ 6,950 II. SATTERWHITE POINT 21,087 III. WARREN COUNTY AREA 6,384 IV. NUTBUSH BRIDGE AREA 1,779 V. GENERAL AREA 3,800	\$ 3,734 17,379 450 854 2,647	\$ 3,216 3,708 5,934 925 1,153
Totals \$ 40,000	\$ 25,064	\$ 14,963



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Retiring Governor LUTHER H. HODGES (left) and New Governor TERRY SANFORD here symbolize the orderly transition of leadership which is traditional in a state where good government is a habit. Able leadership by the Governor is always a major reason why North Carolina continues to lead the Southeast in business and industrial growth.

Governor Terry Sanford, businessman, attorney, former State Senator and

dynamic young leader knows North Carolina and her people. His background and attitude toward business qualify him to continue North Carolina's climate of growth for expanding industry and business. In North Carolina opportunity continues unlimited.

You are invited to communicate in confidence with Governor Terry Sanford, Chairman of the Board of Conservation and Development, Raleigh, North Carolina.



